

INFORMATION PLEASE
ALMANAC
1951

INFORMATION PLEASE ALMANAC 1951



JOHN KIERAN

EDITOR



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FOREWORD



THE 1951 INFORMATION PLEASE ALMANAC might be called our Fifth Anniversary edition. Yes, we have been at it for five years now, and in that time we have learned something about planning, preparing and producing annual almanacs, lifting our aims and widening the scope of this book with each succeeding edition. We trust that our subscribers appreciated our progress in the past and we know that they will profit this year because—in the face of rising prices of all commodities in every direction—we have reduced the price of our Almanac! The regular cloth-bound edition that sold for \$2.50 in 1950 is being sold at \$2 in our 1951 edition. Further than that, in order that more persons may be able to purchase this improved Almanac than we ever have been able to reach in previous years, we are issuing a paper-bound edition at \$1 per copy. We wish to stress the fact that we have not lowered the quality of the production one iota in any department. We have improved all the regular sections of our Almanac. We have added some new features. We are using the same readable type and the same high quality paper that was used in our 1950 edition. We are able to produce a better book at a lower cost because we have profited by experience and we are sharing that profit with our subscribers.

Aside from this merely mercenary matter, which is for the benefit of the purchaser, we call attention to the fact that we have really "gone to town" in our section on the United States this year. We have considerably expanded the information (historical, governmental and financial) offered about the individual States and Territories and, by sending out questionnaires to some famous City Halls about the country, we have gathered a great deal of pertinent municipal facts and figures concerning many of our great cities. An added feature certain to be put to wide use is our Crossword Puzzle Guide, an 18-page section offered as first aid and ready reference for baffled crossword puzzle addicts, of whom there must be millions in this country. For them we have listed the Greek, Roman, Egyptian and Norse deities and legendary heroes and heroines, along with a host of odd names and queer words that have been, are being, and will be used indefinitely in crossword puzzles.

Once again we wish to thank our collaborators, individuals and organizations, for their important share in the production of the 1951 INFORMATION PLEASE ALMANAC, and in particular we express our deep obligation to the loyal and tireless staff in our own office.

JOHN KIERAN, *Editor*



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DECEMBER, 1949

- 1 North Atlantic Treaty nations, meeting in Paris, set basic strategy.
- 7 International Confederation of Free Trade Unions, non-Communist organization, established in London with AFL, CIO, and UMW participating.
- 8 Chiang Kai-shek's Nationalist government of China takes refuge in Formosa, having lost virtually all continental China to Communist forces.
- 9 General Assembly votes 38-14 for U. N. rule of Jerusalem.
- 10 Australia elects conservative coalition government, deposing Labour party after 8-year regime.
- 13 Israel announces it is moving capital from Tel Aviv to Jerusalem.
- 20 Mayor William O'Dwyer, of New York City, is married to Miss Sloan Simpson in Stuart, Fla.
- 24 Pilgrims pass through Holy Door at St. Peter's Basilica in Rome, opening Roman Catholic Church's 25th Holy Year.
- 26 Princeton Press announces new "generalized theory of gravitation" by Albert Einstein.
- 27 United States of Indonesia becomes sovereign republic in ceremony in Amsterdam.

DIED: 3—Philip Barry, 53; Maria Ouspenskaya, 73; 4—Rep. (Ill.) Martin Gorski, 63; 6—"Lead Belly" Ledbetter, 60; 7—Rex Beach, 72; 28—Hervey Allen, 60.

JANUARY, 1950

TWO NEW CRAZES were sweeping the country as the new year rolled in. One was canasta, that South American card game that made all true bridge fiends turn up their noses; but playing-card manufacturers were gleeful, they had sold 30 million packs of canasta cards in the past 7 months. The other craze was nylon shirts. Russia got huffy and boycotted U. N. sessions because the Chinese Communists weren't welcomed in. We wondered: Is the U. N. going the way of the old League of Nations? . . . In New Orleans, a mental patient turned the tables on his psychiatrist: he managed to get the psychiatrist admitted to another hospital as a patient. . . . President Truman gaily predicted that we'd all have three times as much income by the year 2000. But would we be here by then to enjoy it? The awful news burst on the nation that scientists were working on a hydrogen bomb which might be 10 times, maybe 50 times, as death-dealing as the atom bomb. A single H-bomb—if it could be produced—might be able to wipe

out New York City and all its suburbs. And a Happy New Year to you, too!

- 4 *The* (N. Y.) *Sun* ceases publication; bought by the *New York World-Telegram*.
Truman envisions trillion-dollar U. S. production in year 2000, with \$12,000 average annual income for families.
 - 5 U. S. will keep hands off Formosa, giving no military aid to Chiang Kai-shek, Truman announces.
 - 6 Great Britain recognizes Communist government of China.
 - 7 41 women, all but one of them mental patients, die in Davenport, Iowa, hospital fire.
 - 9 Chinese Nationalist gunboat shells U. S. freighter *Flying Arrow* off Shanghai, setting fires.
Truman's budget calls for spending \$42.4 billion in 1951 fiscal year, with \$5.1-billion deficit unless taxes are raised.
 - 12 65 die, 15 saved on British submarine *Truculent*, rammed and sunk by Swedish tanker off London.
 - 13 Yakov A. Malik, Russian delegate, walks out of U. N. Security Council, demanding ouster of Chinese Nationalist delegate.
 - 14 U. S. recalls its official personnel from Peking as result of seizure of U. S. Consulate by Chinese Communists.
 - 19 U. S. advocates U. N. action allowing member nations to return ambassadors to Spain; however, this does not mean approval of Franco regime.
 - 21 Alger Hiss found guilty of perjury on two counts.
 - 22 Preston Tucker and 7 associates found not guilty of defrauding public of \$28 million in collapse of rear-engine auto project.
 - 23 Truman proposes cut in excise taxes but asks for some increases in corporation, estate, and gift taxes to raise \$1 billion additional revenue.
 - 25 Alger Hiss sentenced to 5 years in prison.
Strike over pensions shuts all Chrysler auto plants.
 - 26 India becomes independent republic, dropping allegiance to King of England.
 - 31 Russia recognizes rebel Viet-Nam regime in Indo-China; France protests. Truman orders development of hydrogen super-bomb.
- DIED:** 2—Emil Jannings, 63; 6—William A. Brady, 86; 15—Gen. Henry (Hap) Arnold, 63; 21—George Orwell, 46.

FEBRUARY

THOSE RED LIGHTS on the battleship *Missouri* weren't half so red as the face of the Navy. The "Mighty Mo" got ignominiously stuck in the mud at Norfolk, and it took weeks and a million dollars or so to get her floated again. Meanwhile, the chortling Air Force chanted: "The battleship's here to stay, okay." . . . Also running out of water was New York City, whose reservoirs were sinking to the mud-puddle stage. The city asked everybody to refrain from shaving or bathing on Thursdays; Bowery bums and small boys gave hearty co-operation. . . . It turned out that our atom bomb had never been a secret from Stalin. Dr. Klaus Fuchs, one of England's top atomic scientists had been slipping secret information to the Russians for the last 5 years. And we had our own spy cases. In January, Alger Hiss was found guilty; in March, a jury would decide that it wasn't just love that impelled Judith Coplon to keep rendezvous with Valentin A. Gubitchev. . . . In Italy, Ingrid Bergman gave birth to a bouncing boy, and the news bounced around the world: proud papa was Roberto Rossellini, not her husband, Dr. Peter Lindstrom. Then out came the film *Stromboli*, which one critic said was "neither good Bergman, good Rossellini, nor good anything." . . . In Illinois, the 1,500 students of Wheaton College broke all records for mass piety by praying and confessing in a marathon revival service that lasted 39 hours.

- 2 Ingrid Bergman gives birth to son in Rome hospital.
- 3 British arrest Dr. Klaus Fuchs, atomic scientist, for allegedly giving A-bomb secrets to Russia.
- 7 U. S. and Britain recognize semi-independent native government in Indo-China headed by Bao Dai.

European nations report Marshall Plan has raised their production to prewar level.

- 8 State Secretary Acheson says there is no use trying to reach agreement with Russia; we must build our strength.
- 11 John L. Lewis, as result of 2 court injunctions, orders soft-coal miners back to work; miners continue "no contract-no work" walkout.
- 12 Yale names Dr. A. Whitney Griswold its 16th president.
- 14 Chinese Communists sign 30-year alliance with Russia.
- 17 2 Long Island Railroad commuter trains collide head on, killing 30 and injuring 105.

John L. Lewis again orders striking coal miners back to work; again they refuse.

- 19 New York City dims lights, as in war-time brownout, because of coal shortage.
 - 21 U. S. breaks diplomatic relations with Bulgaria on grounds that U. S. Minister and his staff have been victims of "campaign of systematic persecution." Hungary gives 15-year prison sentence to Robert A. Vogeler, Jr., American business man, who "confessed" to spying.
 - 23 House rejects Administration fair employment practices bill; passes legislation for "voluntary" Fair Employment Practices Commission.
- British Labour party returned to power with majority in House of Commons of only 7.
- 27 U. S. and Canada sign 50-year treaty to increase power output of Niagara River.
 - 28 Russia cuts many retail prices and puts ruble on gold standard, raising its value to 25¢ in terms of U. S. currency.

DIED: 13—Rafael Sabatini, 75; 16—Rep. (Va.) Schuyler Otis Bland, 77; 26—Sir Harry Lauder, 79.

MARCH

DESPERATELY DRY NEW YORK CITY hired a rain maker to tickle the clouds with dry ice. Sure enough, down came the drops, and the reservoirs began to fill. But would it have rained anyhow? Even the rain maker himself didn't claim to know. Likewise desperate were the St. Louis Browns, who had a bad habit of losing baseball games consistently. So they hired a "win maker"—they hoped—a guy who said he'd hypnotize the ball club into victorious habits. . . . The State Department wished somebody would hypnotize Senator Joseph R. McCarthy, Wisconsin Republican, and put him to sleep for a long, long time. He kept saying the State Department was shot full of Communists. He had a good deal of trouble trying to prove it, but Washington nevertheless seethed and rocked with bitter arguments between the pro- and the anti-McCarthyites. It wasn't until well into May that the furor died down. . . . General Motors Corporation shyly disclosed that in 1949 it had realized the greatest net profit ever recorded by an American corporation—a tidy little \$656 million, nearly half as much again as in 1948, which had been a record year for the company. Were we in the midst of a boom? Well, just keep an eye on those television stocks. Also on Faye Emerson's plunging necklines on her TV shows. Faye said any self-respecting neckline ought to plunge at 11 P.M.; she polled her audience, and her audience said it didn't mind in the least. But one TV studio, wishing to avoid argument, pinned a bunch of roses over the V part.

- 1 Britain sentences Dr. Klaus Fuchs to 14 years in prison for giving atomic secrets to Russia.
 - 2 Federal judge finds UMW not guilty of contempt of court for its failure to end soft-coal strike.
 - 3 France to get Saar coal for 50 years under pact signed with Saar.
 - 5 Lewis and coal operators sign new contract; strike ends.
 - 7 Judith Coplon and Valentin Gubitchev found guilty of espionage conspiracy.
 - 9 Coplon sentenced to 15 years; Gubitchev's 15-year sentence to be suspended if he leaves U. S.
- British Labour government wins first test in new parliament, 310-296, beating Conservative-Liberal demand for postponement of steel nationalization.
- 12 Russia elects Supreme Soviet (Parliament); 99.96% of eligible voters go to polls.
- Belgium holds referendum on return to throne of King Leopold III; 57.63% of voters favor it.
- 80 die in crash of chartered airliner in Wales; worst air disaster in history.
- 13 Truman, following Hoover recommendations, sends Congress 21 plans for reorganization of Federal government.
 - 22 New York State adopts rent-control legislation to replace federal control.
 - 23 Eisenhower warns U. S. it is disarming past safety limit.
 - 24 Strikes and riots in Belgium protest return of Leopold III.
 - 26 Owen J. Lattimore named as man whom Sen. Joseph R. McCarthy believes to be "top Soviet" spy in U. S.
 - 28 Truman refuses to give Congress access to Executive Department loyalty files.
- Laurence A. Steinhardt, U. S. Ambassador to Canada, killed in Ontario in crash of U. S. Embassy C-47.
- 29 Eisenhower says U. S. is "taking chances" in cutting budget for armed forces too low.

DIED: 5—Edgar Lee Masters, 81; Sid Grutman, 70; 6—Lew Lehr, 54; Albert Lebrun, 78; 11—Brock Pemberton, 64; 12—Heinrich Mann, 79; 19—Edgar Rice Burroughs, 74; 21—Rep. (Ill.) Ralph E. Church, 68; 24—Harold J. Laski, 56; 25—Frank Buck, 66; Léon Blum, 77.

APRIL

THE NEWSPAPERS WERE full of so-called mercy killings. In Pennsylvania, in Connecticut, in New Hampshire, people dying of cancer had been put out of their agony. Juries were loath to convict. Dr. Hermann N. Sander was acquitted in New

Hampshire. His defense was that the patient already had died before he injected air into her veins. But his license to practice medicine in the state was revoked, and spring was to find him plowing farmland for his neighbors to eke out a living for his family. . . . Some distinctly non-mercy killings were committed by Russian flyers, who shot down an American plane, with the loss of 10 lives, over the Baltic Sea. The Russians said our plane was snooping around Latvia—a little country which our State Department still formally recognizes as independent but which the Russians have converted into one of the republics of the U.S.S.R. . . . "Flying saucers" popped into the news again; a reputable magazine said those swift-traveling visions that people had been seeing were real aircraft of revolutionary design and immense speed. . . . And the U. S. Senate sent a special investigator out to Hollywood to investigate the morals of the film colony. He said his research would not be personal.

- 1 U. S. begins 17th census.
 - 4 Harry Bridges, West Coast longshoremen's leader, convicted of perjury in denying Communist membership when he became U. S. citizen in 1945.
- Thomas K. Finletter, New York lawyer, named Secretary of Air Force.
- 5 U. S. submarine *Pickrel* sets underwater record, traveling 5,200 nautical miles from Hong Kong to Pearl Harbor since March 15.
- Navy seaplane *Marshall Mars*, world's largest flying boat, crash-lands in Pacific near Oahu and burns after exploding; crew escapes in life rafts.
- 6 Owen J. Lattimore denies under oath any Communist affiliation, answering Sen. McCarthy's charge.
- John Foster Dulles, Republican, named foreign-policy adviser to Secretary of State Acheson.
- 8 India and Pakistan sign pact designed to curb religious riots between Hindus and Moslems.
 - 10 Harry Bridges, CIO longshoremen's leader, sentenced to 5 years in prison.
 - 15 Truman vetoes Kerr bill, which would have lifted federal regulation of natural-gas rates.
 - 18 U. S. demands apology and indemnity from Russia for shooting down Navy plane over Baltic Sea.
- Postmaster General Donaldson orders residential mail deliveries cut to one a day to reduce Post Office deficit.
- 19 Czechoslovakia orders U. S. Information Service offices closed.
 - 21 Russia rejects U. S. protest to shooting down of Navy plane.

- 23 Chiang Kai-shek orders evacuation of Hainan as island is invaded by Chinese Communists.
- 26 John Maragon convicted of perjury in 1949 Senate investigation of "5 per-centers."
- 27 10,000 New York City high-school students riot in protest to low pay for teachers.
- New York City apartment dwellers walk up stairs as elevator men strike.
- Herbert Hoover urges reorganization of U. N. without Communist nations.
- DIED:** 3—Kurt Weill, 50; 7—Walter Huston, 66; 8—Waslaw Nijinsky, 60; 11—Bainbridge Colby, 80.

MAY

MIGHT AS WELL face it—1950 was the Year of Television. Those aerials were sprouting thicker and higher than the corn this spring. Baltimore became the first city in which more people watched TV of an evening than listened to radio (50.2 per cent for the eye show against 49.8 for the old-fashioned ear show). A California company was the first to install TV on long-distance busses. A Philadelphia optometrist estimated that by now a whacking 10 per cent of U. S. eye troubles came from TV. A Connecticut school principal estimated that kids devoted 27 hours a week to gaping at TV—only an hour less than their total time in school. And 580 movie theaters had closed in the last six months, blaming TV, at least in part. Poor old radio was tightening its belt: sponsored evening shows were off 37 per cent as compared to five years ago. . . . The teen-agers were reviving songs of the 1920's, which brought back fond memories to their mammas. And Arturo Toscanini, 83, was having a wonderful time touring the U. S. with the NBC Symphony Orchestra. . . . Love and kisses broke out between capital and labor when General Motors signed a five-year peace pact with the United Automobile Workers, granting pensions and raises.

- 2 Sen. Claude Pepper beaten for renomination in Florida by conservative Democrat, Rep. George A. Smathers.
- 3 New York City suspends 8 school teachers because they won't say whether they are Communists.
- 4 100-day Chrysler automotive strike settled; workers get \$100-a-month old-age pensions.

Russia announces all German prisoners of war have been repatriated; Germans are furious, say hundreds of thousands still in Russia.

- 8 U. S. pledges military and economic aid to French-sponsored states in Indo-China to combat Communist rebels.

Supreme Court (5-1) upholds non-Communist oath in Taft-Hartley labor law.

- 13 U. S. orders Czechoslovakia to close 2 consulates in U. S. and withdraw all but 11 of its diplomatic employees.
- 14 Western Allies promise to relax controls on West Germany if it will shun Russia.
- 15 Trygve Lie, Secretary General of U. N., confers with Stalin in effort to end cold war.
- 16 Gov. James H. Duff smashes quarter-century grip of Grundy Republican machine in Philadelphia by winning senatorial nomination.
- 18 North Atlantic Council sets up permanent executive committee of Deputy Foreign Ministers; approves pooling armed forces.

- 19 Fair Employment Practices Commission bill beaten in Senate as cloture fails to pass.

4 munitions barges blow up in South Amboy, N. J., killing 30 and injuring hundreds.

- 21 Earthquake damages Cuzco, former Incan capital of Peru, killing over 50.
- 23 General Motors signs with UAW for 5 years of no strikes; grants pensions and raises.

U. S. arrests Harry Gold, Philadelphia biochemist, as atomic co-spy with Dr. Klaus Fuchs.

Western Allies demand dissolution of East German police militia created by Russia; say it is becoming new German army.

- 25 Congress completes passage of \$3.1-billion foreign-aid bill.
- 26 Britain ends gasoline rationing.
- 27 Hung jury in \$200,000 libel suit brought by Larry Adler and Paul Draper against Mrs. Hester McCullough at Hartford, Conn. She said they were "pro-Communist."
- 28 Half million Communist-led German youths demonstrate in Berlin but fail to invade Western sectors as threatened.

DIED: 4—William Rose Benét, 64; 10—John Gould Fletcher, 64; 24—Field Marshal Earl Wavell, 67; 27—Rep. (Mich.) John A. Lesinski, 65; 29—Col. Lemuel Q. Stoopnagle (Frederick C. Taylor), 52; 30—Rep. (N. Dak.) William Lemke, 71.

JUNE

A ROSY GLOW SPREAD over the nation. Stocks kept climbing; not in twenty years had there been such a bull market—not since the eve of the Great Depression. Sixty million happy Americans (*Time* magazine's estimate) began to move from here to there and back, generally clock-

wise, in one of the greatest vacation migrations known to the human or any other species. President Truman said the world was nearer to peace than at any other time in the last five years. . . . But he hadn't consulted the Russians. On June 25, at dawn, the Communist puppets of North Korea launched an invasion of South Korea. Would the U. S. stand idly by and let Russia conquer a little republic that we had helped set up? No, said Truman, and his quick, emphatic No rang around the world and stirred the hearts of free peoples. He ordered our planes and ships and troops into shooting action in support of the South Koreans. Down went the stock market in the most complete break in twenty years. The value of securities shrank by \$4 billion.

- 1 Japan asks peace treaty with Western Allies, even if Russia won't sign it.
- 5 Supreme Court (9-0) bars segregation of Negroes in 2 Southern universities, and (8-0) on railroad dining cars. Supreme Court (4-3) grants federal government rights to tideland oil off Louisiana and Texas.
- 6 Gen. MacArthur bars Japanese Communist leaders from holding public office. Trygve Lie appeals to 59 nations to admit Communist China to U. N.
- 7 Communist East Germany signs pact with Poland recognizing Oder-Neisse border.
- 8 William W. Remington, Department of Commerce economist, indicted for perjury for denying he was ever Communist.
- 11 Ben Hogan wins U. S. Open golf championship in miraculous comeback after auto smashup 16 months before.
- 13 *New York World-Telegram and the Sun* suspends publication because of CIO Newspaper Guild strike.
- 16 Truman signs bill allowing more European displaced persons to enter U. S.
- 17-18 Navy's flying boat *Caroline Mars* flies 144 persons from Pearl Harbor to San Diego; sets transoceanic passenger record.
- 19 Frank Erickson, foremost U. S. book-maker, pleads guilty on 60 counts; sentenced (June 26) to 2 years in jail and \$30,000 fine.
- 20 Judy Garland cuts throat with water glass after losing film job; lives. 6-nation conference to pool Europe's coal and steel (Schuman plan) opens in Paris.
- 23 University of California discharges 157 for failure to sign non-Communist affirmation.
- 24 Georges Bidault overthrown as Premier of France.

58 die as Northwest Airlines DC-4 explodes over Lake Michigan; country's worst airline disaster.

- 25 Communist North Korea launches invasion of U. S.-sponsored Republic of South Korea.
- 26 Worst stock-market drop in 20 years.
- 27 Truman orders U. S. air and sea forces to fight in support of South Korea; U. N. approves.
- 30 U. S. ground forces from Japan ordered into Korean combat action by Truman.

DIED: 22—Jane Cowl, 65.

JULY

IT SOON DAWNED ON US that we were engaged in no mere "police action" in Korea, to be carried out in a week or two. We were engaged in a full-scale war, and a tough one. Our planes and ships couldn't give enough help, so the GI's were sent into the front lines shooting. Came casualty lists and atrocity reports of American boys killed after they surrendered to the Korean Communists. Came gloom as the GI's were driven back mile after mile, outnumbered and outgunned. Their rifle bullets could not stop the Russian-made tanks. Would our forces be driven ignominiously down the Korean peninsula and into the sea? Still more ominous a question: Was this the beginning of World War III? . . . The nation went on a semi-war basis. Reserves were called up. Young men were drafted. Billions of dollars of war orders went out to the factories. Frantically we sought to rearm. The jittery public began to hoard sugar, began to lay in supplies of shoes, sheets, and automobiles.

- 3 U. S. government deficit for fiscal year is \$3,122,000,000.
- 5 American troops beaten back in first infantry combat in Korea.
- 6 Senate rejects Truman reorganization plan to put RFC into Department of Commerce.
- 7 Truman reinstates draft-law inductions to expand armed forces. Marshall-plan countries of Europe agree on European Payments Union to stimulate integration.
- 8 Truman seizes Rock Island railroad to end wartime switchmen's strike.
- 10 Gen. Lucius D. Clay named head of New York State Civil Defense Commission. Sumner T. Pike confirmed on Atomic Energy Commission after Senate fight. Gordon Dean named chairman (July 11) by Truman.
- 11 René Pleven, of Democratic and Socialist Resistance Union, installed as Premier of France.

- 17 Senate subcommittee (3-2) clears State Department of Communist taint and calls Sen. McCarthy's charges fraudulent.
- 19 Truman asks Congress for \$10-billion war funds and economic controls in U. S.
- 20 U. S. troops driven out of Taejon in South Korea.
- 22 King Leopold III returns to Belgium's throne after 6-year exile; Socialists riot (beginning July 26) in protest.
- 25 Truman asks Congress to boost taxes by \$5 billion.
- 26 Britain, Australia, and New Zealand offer ground troops to aid U. N. forces in South Korea.
- 27 U. S. orders 100,000 men drafted.
- 31 Second Infantry Division units land in Korea in first reinforcements direct from U. S.

DIED: 1—Eliel Saarinen, 76; 11—Buddy De Sylva, 54; 17—Gen. Evangeline Booth, 84; 18—Carl Van Doren, 64; 20—Robert Hitchens, 85; 22—William L. Mackenzie King, 75.

AUGUST

THAT STOCK-MARKET CRASH of late June turned into a boom when Wall Street belatedly got hep to the fact that the Korean war meant billions of government dollars flowing into war orders. Inflation was setting in again; the cost of living began moving up ominously. The Chrysler automobile corporation—wonder of wonders—voluntarily boosted wages; you could have knocked Labor over with a feather. Other big companies had to follow suit. . . . The boom spirit hit the English Channel; twenty-four swimmers dived into it on a single day. Nine of them finished; two broke the record. But not Shirley May France; licked by the Channel again, she gave up swimming, took up softball, left home to get away from her "slave-driving father." . . . The Red scare was a-booming, too. Some people phoned General Foods and said Jean Muir's name was listed in a booklet as a possible Communist sympathizer. Shivering with fright, General Foods dropped her off "The Aldrich Family" television show—only to run into a much worse storm of criticism from people who said Jean Muir wasn't a Communist at all. New York longshoremen refused to unload a \$350,000 load of crab meat because it came from Russia. . . . Hollywood decided that in these times people actually enjoyed being harrowed one way or another. No less than five films about horrible ailments were scheduled—one each concerning cancer, paraplegia, poliomyelitis, smallpox and leprosy.

- 1 Russia returns to U. N. Security Council; Council defeats (8-3) Soviet attempt to seat Chinese Reds.
- U. S. Court of Appeals upholds conspiracy conviction of 11 top U. S. Communists.
- 5 Harry Bridges, pro-Communist union boss of longshoremen, jailed as menace to national security.
- 8 Florence Chadwick, 31, of San Diego, swims English Channel in women's-record time of 13 hr., 28 min.
- Henry A. Wallace quits Progressive party, disillusioned over its pro-Communist line on Korea.
- 11 Consultative Assembly of Council of Europe, meeting at Strasbourg, calls for creation of united European army.
- Belgian Parliament strips King Leopold III of royal power; makes his son, Baudouin, Prince Royal to rule for Leopold.
- 15 Daughter born to Princess Elizabeth of England.

- Republic of Indonesia proclaimed, replacing United States of Indonesia.
- 20 Dr. Gordon S. Seagrave, "Burma Surgeon," arrested as aiding Burma rebels.
- 23 *New York World-Telegram & Sun* strike settled after 10 weeks.
- Stock market goes to new high since 1946.
- French liner *Liberté* (former *Europa*) arrives in New York on maiden voyage.
- 24 Harry Bridges freed from prison on \$25,000 bail.
- 25 Truman orders railroads seized to avert nation-wide strike.
- Chrysler voluntarily raises wages 10 to 15 cents an hour.
- 26 U. S. disowns Navy Secretary Matthews' speech calling for "preventive war."
- 28 Lee Pressman, former U. S. government official, admits he was Communist in 1934-35 and names three others.
- 31 William O'Dwyer quits as mayor of New York City to become U. S. Ambassador to Mexico.

DIED: 2—Luigi Cardinal Lavitrano, 76; 9—Nikolai Miaslovsky, 69; 26—Giuseppe De Luca, 73; 31—Rep. (N. C.) Alfred L. Bulwinkle, 67.

SEPTEMBER

IN GRAND RAPIDS, MICH., a ten-year-old boy was arrested for capitalizing on the current war scare. He stole Army gas masks from the armory and sold them for ten cents apiece. . . . Real-estate people in the New York City area capitalized, too, but they didn't get arrested. Their advertisements softly suggested that properties thirty to fifty miles from the city were

safe from atomic bombs; and the sale of these country properties boomed, along with the prices. . . . In Oakland, Calif., a man built an egg-shaped bomb shelter big enough to house thirty-three persons. "Ever try to crush an egg?" he asked. . . . With the Marines fighting in Korea, President Truman made one of his less tactful statements: in a letter, he wrote that the Marines were nothing but "the Navy's police force," and that they had "a propaganda that is almost equal to Stalin's." Truman promptly and publicly apologized for his "unfortunate choice of language." His letter was auctioned off for \$2,500—proceeds to go to the Marine Corps League. . . . At the beginning of the month, things looked black in Korea; it was touch and go whether the North Korean Communists would push American troops off their dwindling beachhead at the southern tip of the peninsula. Then came General Douglas MacArthur's brilliant amphibious end run and the recapture of Seoul. By the end of the month, everything looked rosy. Korean Communists were on the run.

- 1 Congress gives President power to control prices and wages and institute rationing if necessary.
 - 5 U. S. planes shoot down Russian bomber off Korea.
 - 6 Truman apologizes for calling U. S. Marines just "Navy police force" and accusing them of propaganda.
 - 7 New York Republicans nominate Thomas E. Dewey for Governor; Democrats nominate Walter A. Lynch.
 - 8 Wartime curbs on installment buying ordered, effective Sept. 18.
 - 9 U. S. launches "Point 4" program to help underdeveloped regions of world.
 - 9 Truman approves "substantial increases" in U. S. troops in Western Europe.
 - 10 National Production Authority established to mobilize U. S. economy for war purposes.
 - 12 Sec. of Defense Louis A. Johnson resigns under criticism; Gen. George C. Marshall named to succeed him.
- Big Three Foreign Ministers open conference in New York.
- 15 U. S. troops launch amphibious invasion of central Korea, capturing port of Inchon.
 - 16 Robert N. Denham ousted by Truman as general counsel of National Labor Relations Board.
 - 19 U. S., Britain, and France pledge to fight if West Germany is attacked.
 - 20 U. S. asks major revision of U. N. to give General Assembly powers to preserve peace.

22 Congress passes bill increasing income and corporation taxes by \$4.7 billion; also passes \$17-billion emergency defense appropriation.

Ralph J. Bunche, mediator of Israeli-Arab dispute for U. N., wins 1950 Nobel Peace Prize.

23 Congress passes anti-Communist bill over Truman's veto.

25 New York City drops Police Commissioner William P. O'Brien over cops-gamblers scandal; Thomas F. Murphy, Hiss prosecutor, gets job.

Paul G. Hoffman resigns as ECA administrator; William C. Foster gets job.

26 MacArthur announces capture of Seoul, South Korean capital.

North Atlantic Council agrees on unified defense force.

Lewis W. Douglas resigns as Ambassador to Britain; Walter S. Gifford appointed next day.

30 Ford Foundation announces grants totaling \$3 million for scientific study of human behaviour.

DIED: 11—Jan Christiaan Smuts, 80; 13—Sara Allgood, 66.

OCTOBER

NOTHING LIKE some lively fights to add to the gaiety of the nation. Ernest Hemingway started one with his new novel, *Across the River and Into the Trees*. The literary critics wrangled at the top of their shrill voices. A dismal failure, said some. A masterpiece, said others. Rushing to Hemingway's defense were John O'Hara, who called him the greatest writer since Shakespeare; and Evelyn Waugh, who made a crack about the "high supercilious caddishness" favored by the anti-Hemingway critics. Rushing to Hemingway's financial support was the general public, which stampeded to the bookstores. . . . Another fight was started by the dear old Federal Communications Commission, which gave its blessing to color television—but only to the particular color broadcasting device of CBS. Rival methods were left out in the cold, and their proprietors were actively irked. The whole mushrooming TV industry was in a dither, and so were the seven million owners of sets. Should they wait to see which color device won the long-range battle? Or should they forget the whole thing and go to the movies? . . . This was the month when we found out from the 1950 census that there were nineteen million more of us running around in this country than in 1940. And this was the month when New York City put up its first four signs pointing to atomic-bomb shelters.

- 1 South Korean troops cross 38th Parallel to invade North Korea.

- 4 Stocks reach new high for last 4 years.
- 7 U. N. Assembly (47-5) approves military action in North Korea.
First U. S. troops invade North Korea.
- 11 Federal Communications Commission approves CBS's color television to start Nov. 20.
- 12 Russia casts 46th veto to block recommendation for re-election of U. N. Sec. Gen. Trygve Lie.
- 15 President Truman confers with Gen. MacArthur on Wake Island about Far East policy.
Prime Minister Ben-Gurion forced out in Israel's first Cabinet crisis.
- 19 U. S. and South Korean forces capture Pyongyang, Korean Communist capital.
- 20 U. S. restricts use of rubber by civilians.
- 23 U. S. begins nation-wide roundup of 86 alien Communists for deportation.
- 24 Truman, addressing U. N. on its 5th anniversary, promises U. S. will continue rearming.
- 26 Nobel Prize in medicine awarded jointly to Drs. Edward C. Kendall and Phillip S. Hench, of Mayo Clinic, and Prof. Tadeusz Reichstein, of Switzerland.
South Korean troops reach Manchurian frontier.
- 30 Uprising in Puerto Rico by anti-U. S. Nationalists; crushed within 2 days.

DIED: 2—Rep. (Kans.) Herbert A. Meyer, 64; 19—Edna St. Vincent Millay, 58; 20—Henry L. Stimson, 83; 23—Al Johnson, 67; 29—Gustavus V of Sweden, 92

NOVEMBER

- 2 George Bernard Shaw dead at 94.
- 5 U. N. General Assembly revokes ban on sending top diplomats to Franco Spain.
- 6 MacArthur discloses Chinese Communist troops have entered Korean war against us.
- 7 Election winners: Dewey, Lehman, Impellitteri, Taft; Republicans gain in Senate, making score 49 Democrats, 47 Republicans.
- 8 U. N. Security Council bids Chinese Communists send representatives to answer MacArthur charges of intervention.
- 10 1950 Nobel literature to Bertrand Russell of England; physics Prize to Cecil Frank Powell of England; chemistry prize to Otto Diels and Kurt Adler of Germany; 1949 literature prize to William Faulkner of U. S.
- 13 U. S. orders 35 per cent cut in civilian use of aluminum.
Tibet appeals for U. N. help against Chinese Communist invasion.
- 14 Truman asks excess profits tax to yield \$4 billion.
- 21 First U. S. troops reach Korea-Manchuria boundary.

Votes Cast in the 1950 Election (held Nov. 7, 1950)

State	Democrat	Republican	Total	State	Democrat	Republican	Total
Alabama.....	83,495	.....	112,728 ¹	Nevada.....	25,438	34,723	60,161
Arizona.....	93,041	96,143	189,184	New Hampshire.....	82,043	108,875	190,918
Arkansas.....	232,237	42,823	275,060	New Jersey.....	688,185	859,523	1,547,708
California.....	1,305,834	2,394,351	3,700,185	New Mexico.....	82,924	95,495	178,419
Colorado.....	208,741	235,742	444,483	New York.....	1,985,174	2,811,683	5,267,816 ¹²
Connecticut.....	420,088	436,325	879,122 ²	North Carolina.....	350,000	126,000	476,000
Delaware.....	56,174	73,391	129,565	North Dakota.....	40,580	85,857	126,437
Florida.....	228,417	72,951	301,368	Ohio.....	1,211,658	1,642,537	2,854,195
Georgia.....	36,532	.....	37,182 ³	Oklahoma.....	320,842	303,232	629,074 ¹³
Idaho.....	88,574	98,408	186,982	Oregon.....	110,144	357,841	477,657 ¹⁴
Illinois.....	1,644,137	1,923,068	3,567,205	Pennsylvania.....	1,695,894	1,821,935	3,517,829
Indiana.....	718,335	824,896	1,543,231	Rhode Island.....	183,725	114,184	297,909
Iowa.....	382,516	469,892	855,908 ⁴	South Carolina.....	25,000	.....	25,000
Kansas.....	262,234	316,954	585,407 ⁵	South Dakota.....	84,865	149,071	233,936
Kentucky.....	329,499	273,897	607,592 ⁶	Tennessee.....	161,747	71,165	253,285 ¹⁵
Louisiana.....	79,804	11,863	91,667	Texas.....	227,057	26,572	253,629
Maine ⁷	100,731	136,901	237,632	Utah.....	120,322	142,422	263,237 ¹⁶
Maryland.....	275,857	367,622	643,479	Vermont.....	19,718	69,409	89,127
Massachusetts.....	1,071,937	829,491	1,901,428	Virginia.....	102,848	45,421	152,661 ¹⁷
Michigan.....	925,000	931,000	1,867,000 ⁸	Washington.....	379,248	324,800	704,048
Minnesota.....	303,748	488,010	799,450 ⁹	West Virginia.....	356,000	271,000	627,000
Mississippi.....	59,398	2,394	63,580 ¹⁰	Wisconsin.....	518,541	600,545	1,119,086
Missouri.....	659,901	566,106	1,226,007	Wyoming.....	43,388	52,960	96,348
Montana.....	103,206	93,482	197,926 ¹¹	Total U. S.....	18,684,129	21,049,778	40,332,025 ¹⁸
Nebraska.....	198,352	248,818	447,170				

¹ Includes 29,233 other. ² Includes 22,709 other. ³ Includes 650 other. ⁴ Includes 3,500 other. ⁵ Includes 6,219 other. ⁶ Includes 4,196 other. ⁷ Election held Sept. 11, 1950. ⁸ Includes 10,000 other. ⁹ Includes 7,692 other. ¹⁰ Includes 1,788 other. ¹¹ Includes 1,238 other. ¹² Includes 470,959 other. ¹³ Includes 5,000 other. ¹⁴ Includes 6,772 other. ¹⁵ Includes 20,377 other. ¹⁶ Includes 493 other. ¹⁷ Includes 4,392 other. ¹⁸ Includes 598,118 other. In addition, votes on amendments in Alabama and Georgia exceeded party vote by 395,182, raising total U. S. vote cast to 40,727,213. NOTE: Figures are for office for which highest total vote in state was cast. In most states, figures are incomplete.

THE UNITED STATES OF AMERICA

STATES, TERRITORIES AND CITIES

(State flower, bird, etc. are official unless otherwise indicated; dates in parentheses are those of adoption. Name of Governor is followed by party designation and date of expiration of term. Area is total of land and inland water. Population figures shown with largest cities are for 1950 but are preliminary and subject to change. State population figure for 1950 is final. Revenue and expenditure are for fiscal year 1949.)

ALABAMA

Capital: Montgomery.
Governor: Gordon Persons (Dem., 1955).
Organized as territory: Mar. 3, 1817.
Entered Union & (rank): Dec. 14, 1819 (22).
Succeeded from Union: Jan. 11, 1861.
Re-entered Union: June 25, 1868.
Present constitution adopted: 1901.
Motto: *Audemus jura nostra defendere* (We dare defend our rights).
State flower: Goldenrod (1927).
State bird: Yellowhammer (1927).
State song: "Alabama" (1931).
Nickname: Cotton State.
Origin of name: From Muskogee Indian tribe meaning "good land."
1940 population & (rank): 2,832,961 (17).
1950 population & (rank): 3,061,743 (17).
1940-50 population change: +8.1%.
1940 area & (rank): 51,609 sq. mi. (28).
Geographic center: In Chilton Co., 12 mi. SW of Clanton.
Number of counties: 67.
Largest cities: Birmingham (298,720), Mobile (127,151), Montgomery (105,098), Gadsden (55,528), Tuscaloosa (46,364).
State forests: 101 (17,041 ac.).
State parks: 19 (30,610 ac.).
State general revenue (1949): \$178,916,000.
State general expenditure (1949): \$199,954,000.

Alabama is the biggest heavy-industry state in the South. Cotton goods, iron and steel and saw mill products lead Alabama's manufacturing, which is centered in the mills, mines and factories in and around Birmingham, the "Pittsburgh of the South." The state is also high in the growing of nuts, corn, hay and sweet potatoes. Other interests include the making of commercial fertilizer and shipping of raw cotton, iron and steel and hardwood lumber.

Muscle Shoals, on the Tennessee River, provides a great electric power source. At Tuskegee Institute, founded by Booker T. Washington, Dr. George Washington Carver carried out his famed agricultural research. Alabama is the only state that compels all adults from 14 to 50 to undergo examination for syphilis.

The Confederacy was founded at Montgomery in Feb., 1861, and for a time the city was the Confederate capital.

In 1540, Hernando de Soto and his treasure seekers were the first white men to see the state, although Cabeza de Vaca may have preceded him in 1528.

ARIZONA

Capital: Phoenix.
Governor: Howard Pyle (Rep., 1953).
Organized as territory: Feb. 24, 1863.
Entered Union & (rank): Feb. 14, 1912 (48).
Present constitution adopted: 1912.
Motto: *Ditat Deus* (God enriches).
State flower: Flower of saguaro cactus (1931).
State bird: Cactus wren (1931).
State colors: Blue and old gold (1915).
State song: "Arizona's State Anthem" (1919).
Nickname: Grand Canyon State.
Origin of name: From the Indian "Arizonac," meaning "little spring."
1940 population & (rank): 499,261 (43).
1950 population & (rank): 749,587 (37).
1940-50 population change: +50.1%.
1940 area & (rank): 113,909 sq. mi. (5).
Geographic center: In Yavapai Co., 55 mi. SE of Prescott.
Number of counties: 14.
Largest cities: Phoenix (105,442), Mesa (16,766), Douglas (9,393), Yuma (9,095), Glendale (8,174).
State forests: None.
State parks: 3 (8,250 ac.).
State general revenue (1949): \$68,436,000.
State general expenditure (1949): \$71,317,000.

Mining, particularly of copper, gold, vanadium and silver, leads the industries of Arizona, and the smelting and refining of copper are the state's principal activities.

Irrigation is vital to its agriculture, and its once arid and useless land now produces cotton, corn, wheat, sorghums, citrus fruit and vegetables.

Phoenix, its largest city, is both a popular health resort and a busy shipper of cotton and vegetables. Douglas loads cattle and smelts copper.

With the Hopi, Navajo (the largest in numbers) and Apache tribes, Arizona has the second largest U. S. Indian population spread over fourteen reservations. It also has some of the country's most famous scenery. In the north is the Grand Canyon; in the east is the Petrified Forest.

Marcos de Niza, a Franciscan friar, entered the state in 1539 in search of the mythical seven cities of Cibola, and was followed a year later by Coronado.

ARKANSAS

Capital: Little Rock.
Governor: Sidney S. McMath (Dem., 1953).
Organized as territory: Mar. 2, 1819.

Entered Union & (rank): June 15, 1836 (25).
 Seceded from Union: May 6, 1861.
 Re-entered Union: June 22, 1868.
 Present constitution adopted: 1874.
 Motto: *Regnat populus* (The people rule).
 State flower: Apple Blossom (1901).
 State tree: Pine (1939).
 State bird: Mockingbird.
 State song: "The Arkansas Traveler" (1949).
 Nickname: Wonder State.
 Origin of name: From the Quapaw Indians.
 1940 population & (rank): 1,949,387 (24).
 1950 population & (rank): 1,909,511 (30).
 1940-50 population change: -2.0%.
 1940 area & (rank): 53,102 sq. mi. (26).
 Geographic center: In Pulaski Co., 12 mi. N of W of Little Rock.
 Number of counties: 75.
 Largest cities: Little Rock (101,387), Fort Smith (47,864), North Little Rock (42,142), Pine Bluff (37,147), Hot Springs (29,298).
 State forests: None.
 State parks: 7 (16,759 ac.).
 State general revenue (1949): \$120,024,000.
 State general expenditure (1949): \$120,036,000.

About 90 per cent of the nation's bauxite—the source of aluminum—comes from the earth of Arkansas, which also contains North America's only known diamond mine, located in Pike County near Murfreesboro, and presently inactive.

Mostly flat, Arkansas has an equable southern climate and fertile central valleys which grow cotton, rice, wheat, corn, oats, potatoes and fruit. Other industries are oil production, lumbering and the production of whetstones and antimony ore.

Hot Springs entertains fifteen times its population in guests each year. Its forty-seven famous curative mineral springs, the only ones administered by the Federal Government, are in Hot Springs National Park in the Ouachita Mountains. Pine Bluff has the unique distinction of having the largest archery factory in the country.

Hernando de Soto was probably the first white man to see this state when he explored the area in 1541. The first settlers were French, who, in 1686, started a frontier trading post.

CALIFORNIA

Capital: Sacramento.
 Governor: Earl Warren (Rep., 1955).
 Entered Union & (rank): Sept. 9, 1850 (31).
 Present constitution adopted: 1879.
 Motto: *Eureka* (I have found it).
 State flower: Golden poppy (1903).
 State tree: California redwood (1937).
 State bird: California valley quail (1931).
 State animal: Grizzly bear (unofficial).
 State fish: South fork golden trout (1947).
 State insect: California dog-face butterfly (unofficial).
 State colors: Blue and gold (unofficial).
 State song: "I Love You, California" (unofficial).
 Nickname: Golden State.
 Origin of name: From a book by the Spaniard Ordoñez de Montalvo.
 1940 population & (rank): 6,907,387 (5).
 1950 population & (rank): 10,586,223 (2).
 1940-50 population change: +53.3%.

1940 area & (rank): 158,693 sq. mi. (2).
 Geographic center: In Madera Co., 35 mi. NE of Madera.
 Number of counties: 58.
 Largest cities: Los Angeles (1,957,692), San Francisco (760,753), Oakland (380,576), San Diego (321,485), Long Beach (244,072).
 State forests: 8 (70,500 ac.).
 State parks: 40 (536,284 ac.).
 State general revenue (1949): \$1,102,016,000.
 State general expenditure (1949): \$1,170,053,000.

California, celebrated for cinema and sunshine, is one of the nation's economic giants. It collects more money from raising food and catching fish than any other state and it stands high in oil production, lumbering and manufacturing. Out-of-state tourist visitors and the travel and recreation expenditures of the state's residents continue to play an important part in the expansion of trade and employment opportunities. Irrigation, in which California leads the country, makes possible the big crop harvest of corn, wheat, sugar beets, walnuts, almonds and almost every other kind of fruits and vegetables. The state also leads in making wines and brandies and growing grapes.

Nature is spectacular. Death Valley, in the southeast, is 280 feet below sea level, the lowest spot in the nation; Mt. Whitney, a 14,495-foot peak, is the highest point in the U. S.; Lassen Peak is the only active U. S. volcano although its last eruptions were recorded in the years from 1914 to 1917; and the General Sherman Tree in Sequoia National Park is estimated to be about 3,500 years old. San Pedro is the world's largest man-made harbor, and the Bank of America National Trust and Savings Association, operated and owned by the Gian-nini family, is the world's largest private bank.

Gold, which was responsible for the state's settlement boom, is still found here, but the state's most important mineral products today are oil, natural gas, sand and gravel, lead, tin and cement.

California is a leader in industrial energy and its cities specialize in airplane making, shipbuilding, furniture manufacturing and machinery production.

California's four national parks are great tourist attractions and the San Francisco-Oakland and Golden Gate Bridges are among the world's engineering marvels.

Because written Chinese contains no alphabet, the telephone operators in Chinatown of San Francisco are unique in that they have to memorize the names, addresses and telephone numbers of all subscribers.

Juan Rodriguez Cabrillo, Spanish explorer, was probably the first white man to see the state in 1542.

COLORADO

Capital: Denver.
 Governor: Dan Thornton (Rep., 1953).
 Organized as territory: Feb. 28, 1861.
 Entered Union & (rank): Aug. 1, 1876 (38).

Present constitution adopted: 1876.
 Motto: *Nil sine Numine* (Nothing without Providence).
 State flower: Rocky Mountain columbine (1899).
 State tree: Colorado blue spruce (1939).
 State bird: Lark bunting (1931).
 State colors: Blue and white (1911).
 State song: "Where the Columbines Grow" (1915).
 Nickname: Centennial State.
 Origin of name: From the Spanish, meaning "red."
 1940 population & (rank): 1,123,296 (33).
 1950 population & (rank): 1,325,089 (34).
 1940-50 population change: +18.0%.
 1940 area & (rank): 104,247 sq. mi. (7).
 Geographic center: In Park Co., 30 mi. NW of Pikes Peak.
 Number of counties: 63.
 Largest cities: Denver (412,856), Pueblo (63,561), Colorado Springs (45,268), Greeley (20,286), Boulder (19,916).
 State forests: 1 (70,980 ac.).
 State parks: None.
 State general revenue (1949): \$132,212,000.
 State general expenditure (1949): \$135,319,000.

Colorado, the most elevated state in the nation, with more than 50 of its peaks over 14,000 feet in height and more than 1,000 going beyond the 10,000-foot mark, began as a miner of gold but has been predominantly agricultural in recent times. Wheat, hay, beans, sugar beets, corn, potatoes, barley and truck vegetables head the crop list. Like California and Arkansas, the state has a highly developed irrigation system to counteract its dry climate and promote its agriculture.

Gold, silver, vanadium and molybdenum are still mined.

Pueblo, the "Pittsburgh of the West," makes iron, steel, brick, tile and foundry products. Colorado Springs is perhaps the most popular tourist center in the Rocky Mountain sector. Mount Evans Highway is the highest auto road in the world. The world's highest suspension bridge stretches 1,053 feet over the Royal Gorge of the Arkansas River. Summit Lake, 12,740 feet high, near the top of Mt. Evans, the highest lake in the U. S., also is in Colorado.

Of archeological interest are the cliffs and canyons of the southwestern part of the state dating back at least 1000 years B.C.

Coronado entered the state in 1540.

CONNECTICUT

Capital: Hartford.
 Governor: John Davis Lodge (Rep., 1955).
 Entered Union & (rank): Jan. 9, 1788 (5).
 Present constitution adopted: 1818.
 Motto: *Qui transtulit sustinet* (He who transplanted still sustains).
 State flower: Mountain laurel (1907).
 State tree: White oak (1947).
 State bird: American robin (1943).
 State song: None.
 Nicknames: Constitution State; Nutmeg State; Land of Steady Habits.
 Origin of name: From an Indian word meaning "long river."

1940 population & (rank): 1,709,242 (31).
 1950 population & (rank): 2,007,280 (28).
 1940-50 population change: +17.4%.
 1940 area & (rank): 5,009 sq. mi. (46).
 Geographic center: In Hartford Co., at East Berlin.
 Number of counties: 8.
 Largest cities: Hartford (177,073), New Britain (163,344), Bridgeport (159,352), Waterbury (104,242), New Britain (73,663).
 State forests: 25 (109,828 ac.).
 State parks: 208 (7,114 ac.).
 State general revenue (1949): \$127,462,000.
 State general expenditure (1949): \$152,595,000.

Connecticut earned its sobriquet, the "Arsenal of the Nation," by its ability to turn out firearms and ammunition in early days, and from this developed an ability to turn out precision instruments of all classes.

Connecticut's cities produce a variety of products, some of which are: arms, sewing machines, airplanes, typewriters, motors, hardware, cutlery, tools, clocks, locks, pottery, machinery, brass products and hats. Hartford, which has the oldest U. S. newspaper, the *Courant*, established in 1764, is the insurance capital of the nation.

Connecticut devotes its farmland mainly to dairying, fruit growing and poultry raising. It stands high in tobacco growing and no crop in the nation receives as high a price per acre as does her shade-grown tobacco.

The state is a popular resort area both for its beaches on Long Island Sound and for its inland lakes and forested hills. The southwest part of the state is a suburban area of New York City.

Connecticut was the first state to have a written constitution, the *Fundamental Orders*, adopted by three original towns of Colonial days in Jan., 1639.

A Dutch trader, Adrian Block, began the exploration of the state in 1614.

DELAWARE

Capital: Dover.
 Governor: Elbert N. Carvel (Dem., 1953).
 Entered Union & (rank): Dec. 7, 1787 (1).
 Present constitution adopted: 1897.
 Motto: Liberty and independence.
 State flower: Peach blossom.
 State bird: Blue hen chicken.
 State song: "Our Delaware."
 Nicknames: Diamond State; Blue Hen State.
 Origin of name: In honor of Sir Thomas West, Lord De La Warr.
 1940 population & (rank): 266,505 (46).
 1950 population & (rank): 318,085 (46).
 1940-50 population change: +19.4%.
 1940 area & (rank): 2,057 sq. mi. (47).
 Geographic center: In Kent Co., 11 mi. S of Dover.
 Number of counties: 3.
 Largest cities: Wilmington (109,907), Newark (6,701), Dover (6,322), New Castle (5,399), Elsmere (5,351).
 State forests: 5 (4,200 ac.).
 State parks: None.
 State general revenue (1949): \$22,939,000.
 State general expenditure (1949): \$28,070,000.

Little Delaware, at the lowest mean elevation of any state, grows a great variety of small fruit and vegetables and is a U. S. pioneer in the industry of food canning. Peaches, strawberries, apples, corn, wheat, hay and truck vegetables are the leading crops. Fishing in the bay is an important industry. Delaware's chicken farms are one of the great supply sources for the big markets of the East.

Wilmington, containing one third of the state's population, is the home of the E. I. du Pont de Nemours & Co., which produces mostly explosives in this state, and is one of the many corporations that take advantage of Delaware's low corporate-tax rates.

Under a law of 1771, Delaware still maintains the whipping post as punishment for some crimes but the institution is mostly maintained as a historical oddity.

The first U. S. iron steamship was built in this state in 1836. Delaware was the first state to ratify the Constitution, on December 7, 1787. During the Civil War, the Southern part of the state supplied many supporters to the Confederate cause.

Peter Heyes, a Dutch trader, was the first settler in 1631, although Henry Hudson discovered Delaware Bay in his exploration of 1609.

DISTRICT OF COLUMBIA

(City of Washington)

Land ceded to Congress: 1788 by Maryland; 1789 by Virginia (retroceded to Virginia Sept. 7, 1846).

Seat of government transferred to D. C.: Dec. 1, 1800.

Created municipal corporation: Feb. 21, 1871.

Present form of government established: June 11, 1878.

Board of Commissioners: John Russell Young (Pres.), Guy Mason, Brig. Gen. Gordon R. Young.

Motto: *Justitia omnibus* (Justice to all).

Official flower: American beauty rose.

Origin of name: In honor of Columbus.

1940 population & (rank as city): 663,091 (11).

1950 population & (rank as city): 802,178 (9).

1940-50 population change: +21.0%.

1940 area: Land, 61.4 sq. mi.; inland water, 7.8.

Geographic center: Near corner of Fourth and L Sts., NW.

Altitude: Highest, 420 ft.; lowest, sea level.

Location: Between Virginia and Maryland, on Potomac River.

Churches: Protestant, 425; Roman Catholic, 36; Jewish, 12; others, 4.

City-owned parks: 730 (12,500 ac.).

Telephones: 709,847.

Radio sets: 374,204.

Television sets: 175,000.

Radio stations: AM, 13; FM, 7.

Television stations: 4.

Assessed valuation (1950): \$1,636,871,021.

City tax rate (1950): \$2.15 per \$100.

Bonded debt (1950): None.

Revenue (1950): \$133,586,022.35.

Expenditure (1950): \$128,145,508.26.

The District of Columbia—identical with the City of Washington—is the capital of

the U. S. and the first carefully planned capital in the world.

D. C. history began in 1790 when Congress directed selection of a new capital site, 10 miles square, along the Potomac. When the site was determined, it included thirty and three-quarters square miles on the Virginia side of the river. In 1846, however, Congress returned that area to Virginia.

President Washington had commissioned Major Pierre L'Enfant, a French engineer who had fought in the Revolution, to plan the new capital and in 1800 the government moved in. In 1814, during the War of 1812, a British force fired the capital and it was from the white paint applied to cover fire damage that the President's home came to be called the White House.

Washington's skyline is dominated by the Capitol and the Washington Monument, towering 555 feet. The Capitol, while not in the city center, is the key to the street address system. The city is laid out in rectangular blocks, created by streets intersecting at right angles. In addition, diagonal arteries fan out from various centers. Pennsylvania Avenue—the radial lines are generally named for the states—is the most famous of them, with the White House at number 1600.

The Capitol is 751 feet long and 350 feet wide. It has 431 rooms. The two wings, constructed of marble, house the Senate and the House; and the central part of the building contains the Rotunda, the Statuary Hall and the old Supreme Court chamber. Visitors may go through the building from 9 A.M. until 4:30 P.M. Congress normally convenes at noon, and the floor of the Senate and House must be cleared by 11:45 A.M. The galleries in the Senate and House chambers are open to visitors as long as sessions are under way.

Washington has many other famous buildings and monuments—the Library of Congress, Jefferson Memorial, Lincoln Memorial, Grant Memorial, Tomb of the Unknown Soldier, Treasury Building, the Pentagon, Petersen House (where Lincoln died) and scores of others.

Washington is administered by three commissioners appointed by the President. Two of them must be residents of D. C. and the third must be a U. S. Army engineer appointed by the Chief of Engineers.

FLORIDA

Capital: Tallahassee.

Governor: Fuller Warren (Dem., 1953).

Organized as territory: Mar. 30, 1822.

Entered Union & (rank): Mar. 3, 1845 (27).

Succeeded from Union: Jan. 10, 1861.

Re-entered Union: June 25, 1868.

Present constitution adopted: 1887.

Motto: In God we trust.

State flower: Orange blossom (1909).

State bird: Mockingbird (1927).

State song: "Swanee River" (1935).

Nickname: Sunshine State.

Origin of name: From the Spanish, meaning "feast of flowers" (Easter).

1940 population & (rank): 1,897,414 (27).

1950 population & (rank): 2,771,305 (20).

1940-50 population change: +46.1%.

1940 area & (rank): 58,560 sq. mi. (21).

Geographic center: In Citrus Co., 12 mi. W of N of Brooksville.

Number of counties: 67.

Largest cities: Miami (246,983), Jacksonville (193,880), Tampa (124,073), St. Petersburg (95,712), Orlando (51,826).

State forests: 3 (24,971 ac.).

State parks: 33 (47,771 ac.).

State general revenue (1949): \$194,920,000.

State general expenditure (1949): \$225,164,000.

Agriculture is Florida's biggest steady pursuit, but hotel statistics point to its chief fame—resort and tourist business. Along its coastline, the longest of any state, dozens of communities more than double in population during the winter season when northerners flee snow and cold.

Oranges and grapefruit lead Florida's crop list, then come tomatoes, peanuts, corn, celery and potatoes. Truck gardening and commercial fishing are leading industries. Deep-sea fishing for sport is a leading tourist hobby.

Florida's low elevation is dotted by some 30,000 small lakes and the Everglades swamp in the south. Tampa is one of the largest cigar manufacturers and Jacksonville ships lumber and turpentine. St. Augustine, founded in 1565, is the oldest town of European origin in the U. S. Key West, exclusive resort city, is the southernmost city in the U. S. and is connected to the mainland by a unique causeway.

In 1513, Ponce de León, seeking the mythical "Fountain of Youth," was the first white man to see the state.

GEORGIA

Capital: Atlanta.

Governor: Herman E. Talmadge (Dem., 1955).

Entered Union & (rank): Jan. 2, 1788 (4).

Seceded from Union: Jan. 19, 1861.

Re-entered Union: July 15, 1870.

Present constitution adopted: 1945.

Motto: Wisdom, justice and moderation.

State flower: Cherokee rose (1916).

State tree: Live oak (1937).

State bird: Brown thrasher (1935).

State song: "Georgia" (1922).

Nicknames: Cracker State; Empire State of the South.

Origin of name: In honor of George II of England.

1940 population & (rank): 3,123,723 (14).

1950 population & (rank): 3,444,578 (13).

1940-50 population change: +10.3%.

1940 area & (rank): 58,876 sq. mi. (20).

Geographic center: In Twiggs Co., 18 mi. SE of Macon.

Number of counties: 159.

Largest cities: Atlanta (327,090), Savannah (119,689), Columbus (79,510), Augusta (71,507), Macon (70,106).

State forests: 2 (2,000 ac.).

State parks: 12 (36,500 ac.).

State general revenue (1949): \$176,784,000.

State general expenditure (1949): \$181,950,000.

Georgia is typical of the changing South. The value of its factory products has passed the value of its farm products, and industrialization is ever increasing. Atlanta is achieving importance as an automobile maker. Cotton and lumber products, fertilizer, processed food and a great variety of other items are among the factory output of Macon, Augusta and Savannah.

Georgia ranks high in cotton, tobacco, peanuts and pecans. Georgia's peaches are nationally famous. From its vast stands of pine come more than half of all U. S. resin and turpentine. The state is one of the leaders in the value of its clay products. Cattle grazing is extensive. Georgia marble is widely exported.

Warm Springs has the celebrated foundation operated to aid infantile paralysis victims. It was there that President Franklin D. Roosevelt died of a cerebral hemorrhage on April 12, 1945.

Hernando de Soto, a Spaniard, in 1540, looked over the red clay of Georgia, and General James Oglethorpe founded its first British colony on Feb. 12, 1733, as a haven for debtors and seekers of religious freedom.

IDAHO

Capital: Boise.

Governor: Len B. Jordan (Rep., 1955).

Organized as territory: Mar. 3, 1863.

Entered Union & (rank): July 3, 1890 (43).

Present constitution adopted: 1890.

Motto: *Esto perpetua* (It is perpetuated).

State flower: Syringa (1931).

State tree: White pine (1935).

State bird: Mountain bluebird (1931).

State song: "Our Idaho."

Nicknames: Gem State; Gem of the mountains.

Origin of name: From a Shoshoni Indian word meaning "sunup."

1940 population & (rank): 524,873 (42).

1950 population & (rank): 588,637 (43).

1940-50 population change: +12.1%.

1940 area & (rank): 83,557 sq. mi. (12).

Geographic center: In Custer Co., 24 mi. S of W of Challis.

Number of counties: 44, plus small part of Yellowstone Park.

Largest cities: Boise (34,152), Pocatello (25,882), Idaho Falls (12,855), Twin Falls (17,544), Nampa (16,142).

State forests: None.

State parks: 4 (9,000 ac.).

State general revenue (1949): \$49,599,000.

State general expenditure (1949): \$45,977,000.

Idaho's huge investment in irrigation has advanced its agriculture well ahead of its mining. Idaho potatoes are eaten everywhere. The state grows apples and other fruits and wheat, corn and barley. There is light diversified manufacturing and Pocatello has a cheese factory with a world market.

Idaho mines gold, silver, lead, zinc, copper and tungsten, and still has vast undeveloped mineral wealth. In its rugged central mountains is an area that is reachable only by

pack horse. The forests of the state, covering at least one-third of the area, account for the fact that lumbering is an extensive industry.

Tourist trade is important. Hunting and fishing are excellent. Sun Valley is a famed resort and attracts countless tourists to its swimming and skiing facilities, both to be enjoyed at the same time and season at different levels of the mountain.

Lewis and Clark visited Idaho in 1805 but real settlement began with the gold strike of 1860.

ILLINOIS

Capital: Springfield.

Governor: Adlai E. Stevenson (Dem., 1953).

Organized as territory: Feb. 3, 1809.

Entered Union & (rank): Dec. 3, 1818 (21).

Present constitution adopted: 1870.

Motto: State sovereignty, national union.

State flower: Violet (1908).

State tree: Oak (1908).

State bird: Cardinal (1929).

State song: "Illinois" (1925).

Nickname: Prairie State.

Origin of name: From an Indian word and French suffix meaning "tribe of superior men."

1940 population & (rank): 7,897,241 (3).

1950 population & (rank): 8,712,176 (4).

1940-50 population change: +10.3%.

1940 area & (rank): 56,400 sq. mi. (23).

Geographic center: In Logan Co., 28 mi. NE of Springfield.

Number of counties: 102.

Largest cities: Chicago (3,606,436), Peoria (111,523), Rockford (92,503), East St. Louis (81,950), Springfield (80,832).

State forests: 3 (10,278 ac.).

State parks: 42 (40,000 ac.).

State general revenue (1949): \$540,517,000.

State general expenditure (1949): \$681,475,000.

Illinois anchors the Midwest like a rich giant, versatile in every big wealth-making industry. It stands high in manufacturing, coal mining, farm cash income, oil production. The sprawling Chicago district (including a slice of Indiana) is a great iron and steel producer, meat packer, grain exchange and rail center. Chicago is also a busy long-flight airport city and Great Lakes port area.

As a farmer, Illinois stands first in soy beans and high in corn, oats, wheat, barley, rye, potatoes and truck vegetables. Hog raising and dairying are important industries. The Illinois sand and gravel business is exceeded only by that of California.

Illinois manufactures almost everything. Railroad cars, clothing, furniture, tractors, liquor, watches and farm implements are some of the items made in its several cities. The biggest government arsenal in the world is located on a Mississippi island off Rock Island. Springfield contains Oak Ridge Cemetery where the body of Abraham Lincoln rests.

The year 1858 is marked in Illinois history as the date of the great debating contest between Lincoln and Stephen A. Douglas for the United States senatorship.

Lincoln lost the campaign but his anti-slavery speeches won for him the presidential nomination in the subsequent presidential election.

Marquette and Joliet, in 1673, were the first known explorers of this state.

INDIANA

Capital: Indianapolis.

Governor: Henry F. Schricker (Dem., 1953).

Organized as territory: May 7, 1800.

Entered Union & (rank): Dec. 11, 1816 (19).

Present constitution adopted: 1851.

Motto: The Crossroads of America.

State flower: Zinnia (1931).

State tree: Tulip tree (1931).

State bird: Cardinal (1933).

State song: "On the Banks of the Wabash, Far Away" (1913).

Nickname: Hoosier State.

Origin of name: Meaning "land of Indians."

1940 population & (rank): 3,427,796 (12).

1950 population & (rank): 3,934,224 (12).

1940-50 population change: +14.8%.

1940 area & (rank): 36,291 sq. mi. (37).

Geographic center: In Boone Co., 14 mi. W of N of Indianapolis.

Number of counties: 92.

Largest cities: Indianapolis (424,683), Fort Wayne (132,840), Gary (132,496), South Bend (115,698), Evansville (109,869).

State forests: 14 (68,512 ac.).

State parks: 14 (39,540 ac.).

State general revenue (1949): \$249,046,000.

State general expenditure (1949): \$246,221,000.

Indiana's fifty-one-mile Michigan waterfront is one of the great industrial centers of the world, turning out iron and steel and oil products to make this state a leader in manufacturing. Its cities have some of the world's largest industrial plants and their great output is further swelled by the inland factories. The list of products is endless—automobiles, farm implements, aviation and railroad equipment, sewing machines are made from iron ore mined in the Great Lakes region.

As a farmer the state stands high in soy beans, corn, tobacco, onions, wheat, oats, rye and tomatoes. The state produces most of U. S. peppermint and spearmint oil.

Indianapolis is the largest U. S. city not on a navigable body of water. Wyandotte Cave, the second largest in the U. S., is located in Crawford County of Southern Indiana. West Baden and French Lick are well known for their mineral springs. Indiana was one of the early states to adopt the secret ballot based on the Australian system.

La Salle probably was the first white man to pass through the state in 1671.

IOWA

Capital: Des Moines.

Governor: William S. Beardsley (Rep., 1953).

Organized as territory: June 12, 1838.

Entered Union & (rank): Dec. 28, 1846 (29).

Present constitution adopted: 1857.

Motto: Our liberties we prize and our rights we will maintain.

State flower: Wild rose (1897).
 State bird: Eastern goldfinch (1933).
 State colors: Red, white and blue (In state flag).
 State song: "Song of Iowa."
 Nickname: Hawkeye State.
 Origin of name: Probably from an Indian word meaning "this is the place."
 1940 population & (rank): 2,538,268 (20).
 1950 population & (rank): 2,621,073 (22).
 1940-50 population change: +3.3%.
 1940 area & (rank): 56,280 sq. mi. (24).
 Geographic center: In Story Co., 5 mi. NE of Ames.
 Number of counties: 99.
 Largest cities: Des Moines (176,954), Sioux City (84,035), Davenport (73,640), Cedar Rapids (72,149), Waterloo (64,354).
 State forests: 10 (13,452 ac.).
 State parks: 68 (42,106 ac.).
 State general revenue (1949): \$209,778,000.
 State general expenditure (1949): \$188,436,000.

Iowa stands in a class by itself as a producer of corn and hogs. The state's productivity often brings it the largest agricultural income in the nation. Ninety per cent of the state is under the plow and the fertility of its soil is unsurpassed anywhere. It also grows oats, soy beans, hemp, hay, popcorn, fruit, nuts and vegetables in great quantities.

Its top industrial activity is naturally centered in meat packing. Des Moines fittingly leads all cities in the publication of farm journals and is also a large insurance center. Muscatine is the largest U. S. maker of pearl buttons. Other Iowa factory products are farm implements, washing machines, fountain pens and railroad and auto equipment.

Iowa has always had a low illiteracy rate and in many years has had the lowest in the nation. The first President to be born west of the Mississippi was Herbert C. Hoover, who came from West Branch.

Marquette and Joliet first explored the state in 1673 and it was in 1778 that Julien Dubuque established the first white settlement on the site of the city that was later named in his honor.

KANSAS

Capital: Topeka.
 Governor: Edward F. Arn (Rep., 1953).
 Organized as territory: May 30, 1854.
 Entered Union & (rank): Jan. 29, 1861 (34).
 Present constitution adopted: 1861.
 Motto: *Ad astra per aspera* (To the stars through difficulties).
 State flower: Sunflower (1903).
 State tree: Cottonwood (1937).
 State bird: Western meadow lark (1937).
 State song: "Home on the Range" (1947).
 State march: "The Kansas March" (1935).
 Nicknames: Sunflower State; Jayhawker State.
 Origin of name: From a Sioux word meaning "people of the south wind."
 1940 population & (rank): 1,801,028 (29).
 1950 population & (rank): 1,905,299 (31).
 1940-50 population change: +5.8%.
 1940 area & (rank): 82,276 sq. mi. (13).
 Geographic center: In Barton Co., 15 mi. NE of Great Bend.

Number of counties: 105.
 Largest cities: Wichita (166,306), Kansas City (129,583), Topeka (77,827), Hutchinson (33,524), Salina (26,141).
 State forests: 1 (4,000 ac.).
 State parks: 22 (14,394 ac.).
 State general revenue (1949): \$148,861,000.
 State general expenditure (1949): \$132,385,000.

Kansas finds its strength in wheat growing and flour milling. Slaughtering and meat packing are also extensively pursued. In the western part of the state, where Dodge City recalls the old days of cattle rustling, rich prairie land sprawls over a large area and gives an abundance of winter wheat and fine grazing.

Corn, sorghums, oats, barley, soy beans and potatoes are other crops. Besides oil, Kansas gets zinc, coal, salt and lead from its earth.

The state is the geographical center of the U. S., and the geodetic center of the North American continent, and as such is the area from which official longitudes and latitudes are measured.

Kansas City has the world's largest grain elevator and is the U. S. leader in producing hog serum. John Brown killed slavers in this state before he turned eastward in his effort to spread Negro insurrection.

Dry since the Murray Liquor Law of 1881, Kansas finally repealed prohibition in March, 1949.

Coronado, in his quest for the mythical city of Quivira, one of the seven cities of Cibola, entered the state in 1541.

KENTUCKY

Capital: Frankfort.
 Governor: Lawrence W. Whitherby (Dem., 1951).
 Entered Union & (rank): June 1, 1792 (15).
 Present constitution adopted: 1891.
 Motto: United we stand, divided we fall.
 State flower: Goldenrod.
 State bird: Kentucky cardinal.
 State song: "My Old Kentucky Home."
 Nickname: Blue Grass State.
 Origin of name: From an Iroquoian Indian word probably meaning "meadow land."
 1940 population & (rank): 2,845,627 (16).
 1950 population & (rank): 2,944,806 (19).
 1940-50 population change: +3.5%.
 1940 area & (rank): 40,395 sq. mi. (36).
 Geographic center: In Marion Co., 3 mi. W of N of Lebanon.
 Number of counties: 120.
 Largest cities: Louisville (367,359), Covington (64,282), Lexington (54,449), Owensboro (33,983), Paducah (32,430).
 State forests: 1 (3,624 ac.).
 State parks: 13 (8,136 ac.).
 State general revenue (1949): \$155,108,000.
 State general expenditure (1949): \$148,268,000.

Kentucky prides itself on producing some of the nation's best tobacco, horses and whisky. The state stands high in the production of native asphalt, hemp, coal, corn and oil.

Among the manufactured items produced by its cities are furniture, aluminum ware, brooms, shoes, lumber products, machinery,

textiles and iron and steel products. Besides coal and oil, Kentucky's important minerals are natural gas and quarry products.

Louisville, the largest city, famed for the Kentucky Derby at Churchill Downs, has a large municipal university, distills whisky and is a great cigarette maker. The Blue Grass country is the home of some of the world's finest race horses. Lexington, standing in the center of this country, is a leading tobacconist. Mammoth Cave, with its many miles of underground passages, is a tourist attraction.

Kentucky was credited with a star in the Confederate flag because a secessionist group in the southwest part of the state set up a short-lived government and joined the Confederacy. The legitimate government, however, remained in the Union.

Marquette and Joliet in 1673 saw Kentucky when it was the "Dark and Bloody Ground," fiercely contested by Indian tribes. Daniel Boone explored the country in 1767.

LOUISIANA

Capital: Baton Rouge.

Governor: Earl K. Long (Dem., 1952).

Organized as territory: Mar. 24, 1804.

Entered Union & (rank): Apr. 8, 1812 (18).

Seceded from Union: Jan. 26, 1861.

Re-entered Union: May 29, 1865.

Present constitution adopted: 1921.

Motto: Union, justice and confidence.

State flower: Magnolia (1900).

State bird: Pelican (unofficial).

State song: "Song of Louisiana."

Nicknames: Pelican State; Creole State; Sugar State.

Origin of name: In honor of Louis XIV of France.

1940 population & (rank): 2,363,880 (21).

1950 population & (rank): 2,683,516 (21).

1940-50 population change: +13.5%.

1940 area & (rank): 48,523 sq. mi. (30).

Geographic center: In Avoyelles Parish, 3 mi. SE of Marksville.

Number of parishes (counties): 64.

Largest cities: New Orleans (567,257), Shreveport (125,506), Baton Rouge (123,957), Lake Charles (41,202), Monroe (38,375).

State forests: 2 (8,800 ac.).

State parks: 9 (7,000 ac.).

State general revenue (1949): \$341,036,000.

State general expenditure (1949): \$385,235,000.

Semitropical Louisiana, with much of its land below sea level, is a natural leader in sugar cane, sweet potatoes and rice production. This state, which still calls its counties parishes after the Spanish religious divisions, is also the nation's leading fur trapper with a rich annual bag of mink, muskrat, opossum and raccoon pelts. Other products of importance are sulfur, oil, salt, cotton and lumber. Commercial fishing is extensive.

New Orleans, home of the Mardi Gras, avoids flooding only by an expensive levee and spillway system and the world's largest concentration of drainage pumps. Her industry is making increased use of raw materials from South and Central America.

The Vieux Carré, in this Old World city, called by many the "Little Paris" of the New World, has some of the celebrated restaurants of the nation.

No state has a greater variety or abundance of game birds than Louisiana. Its state-owned wildlife sanctuaries are among the largest in the world.

Hernando de Soto, in 1540, is considered the first white man to see the state, but claims are made for Narvaez, who is reputed to have seen the state in 1528.

MAINE

Capital: Augusta.

Governor: Frederick G. Payne (Rep., 1953).

Entered Union & (rank): Mar. 15, 1820 (23).

Present constitution adopted: 1820.

Motto: *Dirigo* (I guide).

State flower: White pine cone and tassel (1895).

State tree: Pine tree.

State bird: Chickadee (1927).

State song: "State of Maine Song" (1937).

Nickname: Pine Tree State.

Origin of name: From the French province of Maine.

1940 population & (rank): 847,226 (35).

1950 population & (rank): 913,774 (35).

1940-50 population change: +7.9%.

1940 area & (rank): 33,215 sq. mi. (38).

Geographic center: In Piscataquis Co., 18 mi. N of Dover.

Number of counties: 16.

Largest cities: Portland (76,936), Lewiston (41,142), Bangor (31,473), Auburn (23,078), South Portland (21,732).

State forests: 1 (21,000 ac.).

State parks: 6 (133,042 ac.).

State general revenue (1949): \$68,011,000.

State general expenditure (1949): \$71,205,000.

Maine, the largest potato grower in the nation, is supposed to be the political barometer of the nation because it holds its general election a little more than a month before the other states, a situation that has brought forth the popular expression, "As Maine goes, so goes the nation." But since the state is invariably Republican, the nation sometimes fails to follow it.

Maine has the largest forest area in the East, some 16,750,000 acres in timberland and, as a result, pulp and paper making are its leading industries. In addition to the potato crops, hay, oats, buckwheat and apples are grown. Other manufacturing pursuits are textiles, shoes and fruit canning.

Acadia National Park, on Mount Desert Island, approximately 50 miles southeast of Bangor, offers one of the finest examples of mountain and ocean scenery on the Atlantic coast.

With 2,465 lakes, hundreds of streams and a bracing summer climate, Maine is famous as a resort state. Fishing is excellent and deer, bear and other game are plentiful. Its city of Eastport is the most easterly city in the U. S., and York was the first chartered city (in 1642) in the nation.

Samuel de Champlain looked over Maine's rugged area in 1604 but the Cabots probably saw it at least a century earlier.

MARYLAND

Capital: Annapolis.

Governor: Theodore R. McKeldin (Rep., 1955).

Entered Union & (rank): Apr. 28, 1788 (7).

Present constitution adopted: 1867.

Motto: *Fatti maschiti, parole femine* (Manly deeds, womanly words).

State flower: Black-eyed susan (1918).

State tree: White oak (1941).

State bird: Baltimore oriole (1882).

State colors: Black and gold (1904).

State song: "My Maryland" (1939).

Nicknames: Free State; Old Line State.

Origin of name: In honor of Henrietta Maria (Queen of Charles I of England).

1940 population & (rank): 1,821,244 (28).

1950 population & (rank): 2,343,001 (24).

1940-50 population change: +28.6%.

1940 area & (rank): 10,577 sq. mi. (41).

Geographic center: In Anne Arundel Co., 3 mi. E of Collington.

Number of counties: 23, plus 1 independent city.

Largest cities: Baltimore (940,205), Cumberland (37,632), Hagerstown (36,232), Frederick (18,092), Salisbury (15,109).

State forests: 8 (76,697 ac.).

State parks: 5 (4,042 ac.).

State general revenue (1949): \$165,562,000.

State general expenditure (1949): \$174,967,000.

Maryland, a leader in vegetable canning, is cut almost in two by the upthrust of Chesapeake Bay, and with its many streams in this area, it has probably the most river frontage of any of the states. The state is one of the largest chicken raisers in the East and the Chesapeake is the largest crabbing center in the world. In addition to all kinds of vegetables, the state also grows wheat, hay, corn, potatoes and barley. Coal, sand and gravel, cement and stone are the leading mineral products.

The manufacturing products of its cities range from airplanes, steel, clothing, chemicals to meat packing. Annapolis is the site of the U. S. Naval Academy. The state capitol, built in 1772, is the only one besides that of Massachusetts to antedate the Revolution.

Maryland, like Delaware, still retains the whipping post, but it is kept more as a historical oddity than for punishment.

The state was settled in 1632 at St. Marys in the Chesapeake Bay region under an English charter granted to Lord Baltimore and the grant at that time embraced all of present Maryland, Delaware and part of Pennsylvania.

MASSACHUSETTS

Capital: Boston.

Governor: Paul A. Dever (Dem., 1953).

Entered Union & (rank): Feb. 6, 1788 (6).

Present constitution adopted: 1780.

Motto: *Ense petit placidam sub libertate quietem* (By the sword we seek peace, but peace only under liberty).

State flower: Mayflower (1918).

State tree: American elm (1941).

State bird: Chickadee (1941).

State colors: Blue and gold (in flag and shield).

State song: None.

Nicknames: Bay State; Old Colony State.

Origin of name: From two Indian words meaning "great mountain place."

1940 population & (rank): 4,316,721 (8).

1950 population & (rank): 4,690,514 (9).

1940-50 population change: +8.7%.

1940 area & (rank): 8,257 sq. mi. (44).

Geographic center: In Worcester Co., in N part of city of Worcester.

Number of counties: 14.

Largest cities: Boston (790,863), Worcester (201,885), Springfield (162,201), Cambridge (120,676), Fall River (111,759).

State forests: 70 (170,000 ac.).

State parks: 7 (4,792 ac.).

State general revenue (1949): \$340,089,000.

State general expenditure (1949): \$322,479,000.

From the beginning of American history, Massachusetts has led the nation in the making of textiles and Boston has been the biggest U. S. wool market. Despite the dominance of textiles, the factories of this state are famous for a great variety of products such as shoes, watches, machinery, soap and candy, machine tools, wire products, small arms and electrical machinery. The value of the state's fishing products is the highest in the Northeastern area. Boston and Gloucester have superseded Nantucket and New Bedford, of olden-day whaling fame, as the great fishing ports of contemporary America. The principal crops of this state are tobacco, potatoes, wheat, corn, oats, buckwheat and apples.

The growth of factories brought to this state an influx of foreigners and today Boston has one of the largest Irish populations in the nation. Boston became prominent as the "Cradle of Liberty" in early days and it was here that Paul Revere rode from Christ Church on Copp's Hill and the Battle of Bunker Hill was fought.

Small glacial lakes are scattered throughout the state.

The Pilgrims landed at Plymouth Rock in 1620 as the first large group to settle here but legend has it that Eric the Red and his Norsemen saw the state in the year 1000.

MICHIGAN

Capital: Lansing.

Governor: Harry F. Kelly (Rep., 1953).

Organized as territory: Jan. 11, 1805.

Entered Union & (rank): Jan. 26, 1837 (26).

Present constitution adopted: 1909.

Motto: *Si quaeris peninsulam amoenam circumspice* (If you seek a pleasant peninsula, look around you).

State flower: Apple blossom (1897).

State bird: Robin (unofficial).

State animal: Wolverine (unofficial).

State colors: Blue and gold (1865).

State song: "Michigan, My Michigan" (unofficial).

Nickname: Wolverine State.

Origin of name: From two Indian words meaning "great lake."

1940 population & (rank): 5,256,108 (7).

1950 population & (rank): 6,371,766 (7).

1940-50 population change: +21.2%.

1940 area & (rank): 58,216 sq. mi. (22).

Geographic center: In Wexford Co., 5 mi. W of N of Cadillac.

Number of counties: 83.

Largest cities: Detroit (1,838,517), Grand Rapids (175,647), Flint (162,800), Dearborn (94,529), Saginaw (92,352).

State forests: 22 (3,750,000 ac.).

State parks: 92 (109,843 ac.).

State general revenue (1949): \$608,487,000.

State general expenditure (1949): \$637,463,000.

On a map of Michigan, draw an eighty-five-mile circle around Detroit and it will contain the home plants of the companies that make nine out of ten American automobiles. This vast industry, which sprang up about fifty years ago from the carriage-building business, is not the only activity of this state. Airplanes, furniture (Grand Rapids is the furniture center of the U. S.), diesel engines, hoists, pumps, boilers are among its leading items of production. Most of the nation's refrigerators are made in Michigan. Its fertile farm areas grow dry beans, grapes and peaches, potatoes and sugar beets.

Michigan is the only state that is split completely in two parts. The northern peninsula is mining and timber country. The southern part is agricultural and manufacturing country. Connecting Lakes Superior and Huron is the busiest canal in the world—the Sault Ste. Marie. Its 6,000 inland lakes and 2,300 miles of Great Lakes shoreline make it a good vacation land.

Michigan has the greatest inland fisheries in the world and markets at least 20 species from carp, trout, perch, pike to lake herring. The artificial skiing on Iron Mountain is probably the highest in the world.

Jacques Cartier, in 1535, was the first white man to see the state.

MINNESOTA

Capital: St. Paul.

Governor: Luther W. Youngdahl (Rep., 1953). Organized as territory: Mar. 3, 1849.

Entered Union & (rank): May 11, 1858 (32).

Present constitution adopted: 1858.

Motto: *L'Etoile du Nord* (The North Star).

State flower: Moccasin flower (1902).

State tree: Pine (unofficial).

State bird: None.

State song: "Hall Minnesota."

Nicknames: North Star State; Gopher State.

Origin of name: From a Dakota Indian word meaning "sky-tinted water."

1940 population & (rank): 2,792,300 (18).

1950 population & (rank): 2,982,483 (18).

1940-50 population change: +6.8%.

1940 area & (rank): 84,068 sq. mi. (11).

Geographic center: In Crow Wing Co., 10 mi. SW of Brainerd.

Number of counties: 87.

Largest cities: Minneapolis (517,277), St. Paul (309,474), Duluth (104,066), Rochester (29,634), St. Cloud (28,375).

State forests: 32 (2,011,270 ac.).

State parks: 56 (83,385 ac.).

State general revenue (1949): \$240,714,000.

State general expenditure (1949): \$239,635,000.

A few square miles of Northern Minnesota, in the Mesabi, Cuyuna and Vermilion Ranges, produce most of the nation's iron ore, and provide the activity for the port of Duluth. Farm and factory are equally important in Minnesota. Its farms produce oats, butter, eggs, milk, corn, wheat, potatoes, etc. Its factory production follows the pattern of the Midwest. Machinery, furniture, foundry products, etc. are made here.

St. Paul, whose twin city of Minneapolis faces it on the other side of the Mississippi, is the nation's biggest publisher of calendars and law books. With over 11,000 lakes, the state is famous for its fishing, and deer, bear and fur trapping. Lake Itasca is the source of the Mississippi.

The Arrowhead, covering ten counties in Northeastern Minnesota, and the district centering about the Detroit lakes, are famous resort regions.

In 1655, Radisson and Groseilliers, French traders from Canada, were the first white men to see the state.

MISSISSIPPI

Capital: Jackson.

Governor: Fielding L. Wright (Dem., 1952).

Organized as territory: Apr. 7, 1798.

Entered Union & (rank): Dec. 10, 1817 (20).

Succeeded from Union: Jan. 9, 1861.

Re-entered Union: Feb. 23, 1870.

Present constitution adopted: 1890.

Motto: *Virgute et armis* (By valor and arms).

State flower: Magnolia blossom (1900).

State tree: Magnolia (1938).

State bird: Mockingbird (1944).

State song: "Way Down South in Mississippi" (1948).

Nickname: Magnolia State.

Origin of name: From an Indian word meaning "great water."

1940 population & (rank): 2,183,796 (23).

1950 population & (rank): 2,178,914 (26).

1940-50 population change: -0.2%.

1940 area & (rank): 47,716 sq. mi. (31).

Geographic center: In Leake Co., 9 mi. N of W of Carthage.

Number of counties: 82.

Largest cities: Jackson (97,674), Meridian (41,709), Biloxi (37,034), Greenville (29,914), Hattiesburg (29,432).

State forests: 1 (1,760 ac.).

State parks: 10 (10,972 ac.).

State general revenue (1949): \$130,468,000.

State general expenditure (1949): \$135,386,000.

Mississippi, the stronghold of the Old South, is one of the least industrial of all the states. More than half of its population makes a living directly from the soil and cotton is still king in this state. The world's largest cotton plantation of 35,000 acres is located at Scott. Other crops are corn, peanuts, oats, pecans and sugar cane. Despite its agricultural nature, Mississippi reflects the southern trend toward industrialization and its factory products are centered around cotton, iron and lumber products.

Mississippi's Central Hills have produced a serious soil-erosion problem due to the

virtual over-emphasis placed on cotton growing through the years.

Mississippi was the first state to ratify the Eighteenth Amendment and is still one of the two states that bans the sale of hard liquor. In 1940, it had the second largest Negro population, Georgia having the largest. The state abounds in historical landmarks and is the home of the Vicksburg National Military Park commemorating Grant's military victory on this site.

Hernando de Soto, in 1540, was the first white man to see the state.

MISSOURI

Capital: Jefferson City.
Governor: Forrest Smith (Dem., 1953).
Organized as territory: June 4, 1812.
Entered Union & (rank): Aug. 10, 1821 (24).
Present constitution adopted: 1945.
Motto: *Salus populi suprema lex esto* (The welfare of the people shall be the supreme law).
State flower: Hawthorn (1923).
State bird: Bluebird (1927).
State colors: Red, white and blue (1913).
State song: "Missouri Waltz" (1949).
Nickname: Show-me State.
Origin of name: From an Indian word probably meaning "muddy water."
1940 population & (rank): 3,784,664 (10).
1950 population & (rank): 3,954,653 (11).
1940-50 population change: +4.5%.
1940 area & (rank): 69,674 sq. mi. (18).
Geographic center: In Miller Co., 20 mi. SW of Jefferson City.
Number of counties: 114, plus 1 independent city.
Largest cities: St. Louis (852,623), Kansas City (453,290), St. Joseph (75,572), Springfield (66,302), University City (39,595).
State forests: 7 (121,000 ac.).
State parks: 23 (54,866 ac.).
State general revenue (1949): \$253,572,000.
State general expenditures (1949): \$255,483,000.

Missouri, touching both South and North, ranks highest in mining lead, making corn-cob pipes and breeding mules. Sometimes called the "saddle horse capital of the world" because of its excellent breeds, this state also grows corn, wheat, oats, barley, potatoes, tobacco and cotton on its fertile table land climbing to the Ozark Mountains. This country of rugged, timbered hills and deep valleys, has more than 10,000 swift-flowing streams. Its industrial plants produce automobiles, shoes, drugs, chemicals, beer and street cars.

Eads Bridge, spanning the Mississippi River at St. Louis, probably handles more freight cars than any other bridge in the world. Bagnell Dam, across the Osage River in the Ozarks, completed in 1931, created one of the largest artificial lakes in the world, running for 129 miles and having a shoreline of approximately 1,300 miles.

The homes of two of Missouri's most publicized sons—Mark Twain and Jesse James—are tourist attractions.

Missouri, like Kentucky, had a star in the Confederate flag because a minority of the

state legislature adopted an ordinance of secession. The Governor and pro-secession legislature, however, were ousted and the state remained in the Union.

The French explorer, La Salle, entered Missouri in 1682.

MONTANA

Capital: Helena.
Governor: John W. Bonner (Dem., 1953).
Organized as territory: May 26, 1864.
Entered Union & (rank): Nov. 8, 1889 (41).
Present constitution adopted: 1889.
Motto: *Oro y plata* (Gold and silver).
State flower: Bitterroot (1895).
State tree: Ponderosa pine (1949).
State bird: Western meadow lark (1931).
State song: "Montana" (1945).
Nickname: Treasure State.
Origin of name: From the Latin, meaning "mountainous region."
1940 population & (rank): 559,456 (39).
1950 population & (rank): 591,024 (42).
1940-50 population change: +5.6%.
1940 area & (rank): 147,138 (3).
Geographic center: In Fergus Co., 12 mi. W of Lewistown.
Number of counties: 56, plus small part of Yellowstone National Park.
Largest cities: Great Falls (39,006), Butte (32,904), Billings (31,725), Missoula (22,320), Helena (17,498).
State forests: 7 (235,876 ac.).
State parks: 4 (2,802 ac.).
State general revenue (1949): \$52,817,000.
State general expenditure (1949): \$53,945,000.

Montana's story is the old Western story—few settlers until a gold strike in 1858 brought an influx. Mining is its present occupation, and lead, zinc, silver, coal and oil are taken from its earth.

Butte, sitting on the "richest hill in the world," is the center of the area that once supplied half of the U. S. copper (its most important mineral). Livestock, wool, lumber and dude ranching round out its interests. Agriculture is dependent on irrigation.

The state as a whole still possesses the frank character of the old days, reflected in the legend that the only reason Helena was selected as the name to replace Last Chance Gulch was because of the suggestion of profanity in the front part of that name. Glacier National Park is a popular tourist area with its rugged scenery, hunting areas and dude ranches. While little development has as yet been made, Montana offers fine potentialities for winter sports. Snow conditions are good in the winter in the National Forest Service areas.

French traders, probably sons of Verendrye, first explored the state in 1742.

NEBRASKA

Capital: Lincoln.
Governor: Val Peterson (Rep., 1953).
Organized as territory: May 30, 1854.
Entered Union & (rank): Mar. 1, 1867 (37).
Present constitution adopted: 1875.
Motto: Equality before the law.
State flower: Goldenrod (1895).
State tree: American elm (1937).

State bird: Western meadow lark (1929).
 State song: "My Nebraska" (unofficial).
 Nickname: Cornhusker State.
 Origin of name: From an Oto Indian word meaning "flat water."

1940 population & (rank): 1,315,834 (32).
 1950 population & (rank): 1,325,510 (33).
 1940-50 population change: +0.7%.
 1940 area & (rank): 77,237 sq. mi. (14).
 Geographic center: In Custer Co., 10 mi. NW of Broken Bow.

Number of counties: 93.
 Largest cities: Omaha (247,408), Lincoln (97,423), Grand Island (22,835), Hastings (20,108), North Platte (15,390).
 State forests: None.
 State parks: 7 (1,036 ac.).
 State general revenue (1949): \$75,409,000.
 State general expenditure (1949): \$77,390,000.

Nebraska lives by its expansive sea of grain, reflected in its bumper crops of rye, corn and wheat. There are more varieties of grass growing in this state, valuable for forage, than in any other state in the nation. Its sizable cattle and hog industry help to make Omaha a great stockyard and meat-packing center. Flour, freight cars, brick and tile are products of Nebraska.

One of the world's largest creameries is at Lincoln. Oil was discovered in 1939 and has since grown into a large industry. In 1937, after a constitutional amendment three years earlier, Nebraska became the only state in the union to have a unicameral legislature, a one-house law-making group to which members are elected without party designation.

Spanish Coronado entered Nebraska in 1541.

NEVADA

Capital: Carson City.
 Governor: Charles Russell (Rep., 1955).
 Organized as territory: Mar. 2, 1861.
 Entered Union & (rank): Oct. 31, 1864 (36).
 Present constitution adopted: 1864.
 Motto: All for our country.
 State flower: Sagebrush (1917).
 State bird: Mountain bluebird (unofficial).
 State colors: Blue and silver (unofficial).
 State song: "Home Means Nevada" (1933).
 Nicknames: Sagebrush State; Silver State.
 Origin of name: From the Spanish, meaning "snow-clad."

1940 population & (rank): 110,247 (48).
 1950 population & (rank): 160,083 (48).
 1940-50 population change: +45.2%.
 1940 area & (rank): 110,540 (6).
 Geographic center: In Lander Co., 23 mi. SE of Austin.

Number of counties: 17.
 Largest cities: Reno (32,225), Las Vegas (24,418), Sparks (8,172), Elko (5,389), North Las Vegas (3,838).
 State forests: None.
 State parks: 4 (1,600 ac.).
 State general revenue (1949): \$18,602,000.
 State general expenditure (1949): \$19,620,000.

Nevada, the smallest state in population, had in 1940 little more than one person per square mile. It was made famous by the discovery of the fabulous Comstock Lode in 1859, and has since lived mainly on its mines which give up large quantities of

gold, silver, copper, lead, zinc, quicksilver and tungsten. In 1931, the state created a new industry by writing an easy divorce law and Reno has since become the "divorce capital of the nation." Gambling was legalized and the gaming tables now pay a one-per cent tax to add to the state's income.

Near Las Vegas, on the Colorado River, stands the Hoover Dam which has twice changed its name (Hoover to Boulder to Hoover), the highest in the world at 726 feet. The state's agricultural crop consists mainly of wheat, barley and potatoes. Carson City is the smallest state capital in population in the U. S. Nevada was the first in the world to use gas for capital punishment.

Francisco Garcés, a Franciscan friar en route to California, saw Nevada's rugged scenery in 1775.

NEW HAMPSHIRE

Capital: Concord.
 Governor: Sherman Adams (Rep., 1953).
 Entered Union & (rank): June 21, 1788 (9).
 Present constitution adopted: 1784.
 Motto: Live free or die.
 State flower: Purple lilac (1919).
 State tree: White birch (1947).
 State bird: None.
 State song: "Old New Hampshire" (1949).
 Nickname: Granite State.
 Origin of name: From the English county of Hampshire.
 1940 population & (rank): 491,524 (45).
 1950 population & (rank): 533,242 (44).
 1940-50 population change: +8.5%.
 1940 area & (rank): 9,304 sq. mi. (43).
 Geographic center: In Belknap Co., 3 mi. E of Ashland.
 Number of counties: 10.
 Largest cities: Manchester (82,581), Nashua (34,666), Concord (27,984), Portsmouth (18,793), Berlin (16,545).
 State forests: 99 (20,219 ac.).
 State parks: 27 (30,408 ac.).
 State general revenue (1949): \$37,505,000.
 State general expenditure (1949): \$44,115,000.

New Hampshire is the only state that ever played host at the formal conclusion of a foreign war when, in 1905, Portsmouth was the scene of the treaty ending the Russo-Japanese War. The sandy and stony loam of this state needs liberal fertilization for the growing of its principal crops—fruit, truck vegetables, corn, oats, hay and potatoes. Its chief manufacturing is the production of textiles, leather goods, pulp and paper products.

New Hampshire was the first state to declare its independence from Great Britain and to adopt a constitution. Mt. Washington has recorded some of the world's strongest wind velocities, the last recording of record proportions being registered at 231 miles per hour. The state also has the largest legislative body, a group of law makers varying from 350 to 400.

With 1,300 lakes and good climate for both winter sports and summer vacations, the state is highly popular as a resort area.

Martin Pring, an English sailor, was probably the first white man to see the state in 1603.

NEW JERSEY

Capital: Trenton.
 Governor: Alfred E. Driscoll (Rep., 1954).
 Entered Union & (rank): Dec. 18, 1787 (3).
 Present constitution adopted: 1947.
 Motto: Liberty and prosperity.
 State flower: Violet (1913).
 State bird: Eastern goldfinch (1935).
 State colors: Blue and gold.
 State song: None.
 Nickname: Garden State.
 Origin of name: From the Channel island of Jersey.
 1940 population & (rank): 4,160,165 (9).
 1950 population & (rank): 4,835,329 (8).
 1940-50 population change: +16.2%.
 1940 area & (rank): 7,836 sq. mi. (45).
 Geographic center: In Mercer Co., 5 mi. SE of the State Capitol.
 Number of counties: 21.
 Largest cities: Newark (437,857), Jersey City (300,447), Paterson (139,423), Trenton (127,867), Camden (124,543).
 State forests: 9 (56,628 ac.).
 State parks: 17 (13,109 ac.).
 State general revenue (1949): \$246,190,000.
 State general expenditure (1949): \$257,130,000.

New Jersey is one of the most intensely industrial areas of the nation in spite of its small size; its northern part is sometimes called "America's Ruhr." This manufacturing dynamo, whose greatest single industry is the making of electrical machinery, also makes dyed textiles, chemicals, paints, elevators, silk products, pottery, pen points and warships. At its southern point, the activity is focused in an extensive truck gardening business. New Jersey's seaports are among the busiest in the nation.

The oldest U. S. highway was built in Warren County in 1650; the first lighthouse in America was built in 1764 at Sandy Hook. Outside of Morristown is the Seeing Eye Training School, where dogs are trained to lead the blind.

Because of its extended seaboard, New Jersey is a popular resort state, especially during the summer months. Its 120 miles from Sandy Hook to Cape May have at least 40 beaches which make it a great playground.

The first white man to see New Jersey was Giovanni da Verrazano, a Florentine sailor, carrying French papers, in 1524.

NEW MEXICO

Capital: Santa Fe.
 Governor: Edwin L. Mechem (Rep., 1953).
 Organized as territory: Sept. 9, 1850.
 Entered Union & (rank): Jan. 6, 1912 (47).
 Present constitution adopted: 1912.
 Motto: *Crescit eundo* (We grow as we go).
 State flower: Yucca (1927).
 State tree: Piñon (1949).
 State bird: Road runner (1949).
 State colors: Flaming red and golden orange (1915).
 State song: "O, Fair New Mexico" (1916).
 Nicknames: Land of Enchantment; Sunshine State.
 Origin of name: From the country of Mexico.
 1940 population & (rank): 531,818 (42).

1950 population & (rank): 681,187 (39).
 1940-50 population change: +28.1%.
 1940 area & (rank): 121,666 sq. mi. (4).
 Geographic center: In Torrance Co., 12 mi. W of S of Willard.
 Number of counties: 31.
 Largest cities: Albuquerque (97,012), Santa Fe (27,547), Roswell (25,572), Carlsbad (17,915), Clovis (17,168).
 State forests: None.
 State parks: 6 (78,000 ac.).
 State general revenue (1949): \$67,277,000.
 State general expenditure (1949): \$69,432,000.

Bilingual New Mexico is the only state where both English and Spanish are accepted as official languages. The two cultures of this state give it a picturesqueness that attracts many tourists. Mining and the raising of cattle and crops provide the state's chief interests. Irrigation is vital.

The state contains the largest Indian reservation in the U. S. with over 16,000,000 acres, inhabited by the Navajo tribe. The Apaches and Utes live in three other reservations in this state (the Jicarilla Apache, at Horse Lake; the Mescalero Apache, north-east of Alamogordo; the Navajo, in San Juan and McKinley counties; and the Southern Ute, in the northern part of San Juan County). Carlsbad Caverns, the largest in the world, attract many visitors annually. The highest golf course in the world, over 9,000 feet above sea level, is near Alamogordo.

The state's dry and healthful climate makes it a great recuperative mecca for tuberculars. Santa Fe, the oldest seat of government in the U. S., founded by the Spaniards in 1609-10, is a sight-seers' paradise, as well as a health resort.

Cabeza de Vaca traversed the state in 1528.

NEW YORK

Capital: Albany.
 Governor: Thomas E. Dewey (Rep., 1955).
 Entered Union & (rank): July 26, 1788 (11).
 Present constitution adopted: 1894.
 Motto: Excelsior (Higher).
 State flower: Rose (unofficial).
 State tree: Sugar maple (unofficial).
 State bird: None.
 State song: None.
 Nickname: Empire State.
 Origin of name: In honor of the English Duke of York.
 1940 population & (rank): 13,479,142 (1).
 1950 population & (rank): 14,830,192 (1).
 1940-50 population change: +10.0%.
 1940 area & (rank): 49,576 sq. mi. (29).
 Geographic center: In Madison Co., 6 mi. E of S of Oneida.
 Number of counties: 62.
 Largest cities: New York (7,835,099), Buffalo (577,393), Rochester (331,252), Syracuse (220,067), Yonkers (152,533).
 State forests: 337 (501,195).
 State parks: 25 (2,525,127).
 State general revenue (1949): \$1,051,927,000.
 State general expenditure (1949): \$1,242,259,000.

New York, with the great metropolis of New York City, is the spectacular nerve center of the nation. It leads in population, manufacturing, foreign trade, commercial

and financial transactions, book and magazine publishing, theatrical production and a host of other fields.

New York City is not only a national but an international leader. It is the busiest seaport in the world; its airport at La Guardia Field was the world's largest commercial airport until supplemented by the Idlewild Field. First in manufacturing since 1824, the city today has a gigantic clothing and fur industry and also makes chemicals, paints, drugs, machinery, paper, wood and textile products and houses the tallest buildings in the world. Nearly all the rest of the state's manufacturing is done along the Hudson River north to Albany and runs from planes, flour, photographic and optical equipment, shirts, typewriters, washing machines to auto bodies and parts. Dairying, truck gardening, the raising of potatoes, onions, cabbage keep the New York farmer prosperous. The growing of grapes and the making of wine is a major industry.

New York's extremely rapid commercial growth may be partly attributed to Governor De Witt Clinton who pushed through the construction of the Erie Canal (Buffalo to Albany) which was formally opened in 1825. The canal, the first of the great man-made waterways of the U. S., opened a new vista of commercial expansion.

The state leads the nation and the world as a tourist attraction. The convention and tourist business is the state's fifth greatest source of income and the famous resort areas upstate in and around Lakes Champlain and George abound in winter sports.

For a short time, New York City was the U. S. Capital and George Washington was inaugurated there as the first President on April 30, 1789. It is a key state in any national election, and so significant in the life of the country that any New York Governor is likely to become a presidential possibility.

Henry Hudson discovered New York in 1609 in his trip up the river later named in his honor. On the basis of his explorations, the Dutch bought the island of Manhattan for \$24 from the Indians.

NORTH CAROLINA

Capital: Raleigh.

Governor: W. Kerr Scott (Dem., 1953).

Entered Union & (rank): Nov. 21, 1789 (12).

Seceded from Union: May 20, 1861.

Re-entered Union: July 20, 1868.

Present constitution adopted: 1876.

Motto: *Esse quam videri* (To be rather than to seem).

State flower: Dogwood (1941).

State bird: Cardinal (1943).

State song: "The Old North State" (1927).

State Colors: Red and blue (1945).

Nicknames: Tar Heel State; Old North State.

Origin of name: In honor of Charles I of England.

1940 population & (rank): 3,571,623 (11).

1950 population & (rank): 4,061,929 (10).

1940-50 population change: +13.7%.

1940 area & (rank): 52,712 sq. mi. (27).

Geographic center: In Chatham Co., 10 mi.

NW of Sanford.

Number of counties: 100.

Largest cities: Charlotte (133,219), Winston-Salem (86,816), Greensboro (73,703), Durham (70,307), Raleigh (65,123).

State forests: None.

State parks: 13 (18,768 ac.).

State general revenue (1949): \$279,801,000.

State general expenditure (1949): \$269,291,000.

North Carolina is the nation's busiest tobaccoist. Its factories—the biggest are in Durham and Winston-Salem—make more than half of all the cigarettes smoked in this country. Add to this the output of clothing factories and the cotton mills and the state stands high in manufacturing. Its agricultural output is centered in the growing of corn, cotton, hay, peanuts and fruit. The red spruce stand (the U. S. largest) in the Great Smoky National Park has caused the rise of the furniture business in this state in recent years.

North Carolina has led the field in many economic and social reforms. It is still the only Southern state that pays its Negro teachers the same salary it does its white teachers. Its school bus system, operated by certified student drivers, transports more children to school and back home again than any other state in the Union. The state has many streams and falls and has, therefore, a high potential for hydroelectric power. The resort business both at the shore and in the mountains is extensive. Virginia Dare, the first white child of English parentage in North America, was born in this state in 1587.

Giovanni da Verrazano, in 1524, was the first white man to visit this state.

NORTH DAKOTA

Capital: Bismarck.

Governor: C. Norman Brunsdale (Rep., 1953).

Organized as territory: Mar. 2, 1861.

Entered Union & (rank): Nov. 2, 1889 (39).

Present constitution adopted: 1889.

Motto: Liberty and union, now and forever: one and inseparable.

State flower: Wild prairie rose (1907).

State tree: American elm (1947).

State bird: Western meadow lark (1947).

State song: "North Dakota Hymn" (1947).

Nickname: Flickertail State.

Origin of name: From the Dakota tribe, meaning "united in friendly compact."

1940 population & (rank): 641,935 (39).

1950 population & (rank): 619,636 (41).

1940-50 population change: -3.5%.

1940 area & (rank): 70,665 sq. mi. (16).

Geographic center: In Sheridan Co., 5 mi. SW of McClusky.

Number of counties: 53.

Largest cities: Fargo (37,981), Grand Forks (26,617), Minot (21,924), Bismarck (18,544), Jamestown (10,601).

State forests: None.

State parks: 3 (2,025 ac.).

State general revenue (1949): \$55,038,000.

State general expenditure (1949): \$47,740,000.

North Dakota, politically progressive, operates the only state-owned bank, flour mill and grain elevator in the nation. The state owes its main activity to agriculture with over 87 per cent of its acreage devoted

to the growth of barley, wheat, rye, oats. Most of its manufacturing—the making of butter, cheese, flour and milk products—is tied directly to the land.

The finest farming land is in the Red River Valley, celebrated in song. Cattle raising is centered in the Missouri Valley.

"Number One Northern Hard," a wheat first grown in this state, still brings premium prices for its excellence of quality. Sacajawea, a Shoshoni Indian woman, is probably North Dakota's most notable person. In 1805 she joined Lewis and Clark and made herself so useful as guide and diplomat that the expedition might have been lost without her. Geologists believe that this state holds two-thirds of American deposits of lignite.

The geographic center of the North American continent is located in Pierce County, latitude 48°10'N, longitude 100°10'W.

A French trader in furs, Verendrye, entered the state from Canada in 1738.

OHIO

Capital: Columbus.

Governor: Frank J. Lausche (Dem., 1953).

Entered Union & (rank): Feb. 19 or Mar. 1, 1803 (date disputed) (17).

Present constitution adopted: 1851.

Motto: None.

State flower: Scarlet carnation (1904).

State bird: Cardinal (1933).

State song: None.

Nickname: Buckeye State.

Origin of name: From an Iroquoian word meaning "great river."

1940 population & (rank): 6,907,612 (4).

1950 population & (rank): 7,946,627 (5).

1940-50 population change: +15.0%.

1940 area & (rank): 41,222 sq. mi. (34).

Geographic center: In Delaware Co., 25 mi. E of N of Columbus.

Number of counties: 88.

Largest cities: Cleveland (905,636), Cincinnati (500,510), Columbus (374,770), Toledo (301,358), Akron (273,189).

State forests: 14 (82,381 ac.).

State parks: 5 (3,867 ac.).

State general revenue (1949): \$500,795,000.

State general expenditure (1949): \$723,551,000.

With vast coal and oil fields on the one hand, with Great Lakes iron ore close by on the other, Ohio automatically developed into one of the nation's greatest industrial states. The vast and varied factory output of its cities runs from wire, nails, nuts, bolts, paper, radios, cash registers, golf clubs, refrigerators to motors of all kinds and sizes. Cleveland is the world's largest handler of iron ore. Toledo is one of the nation's largest shippers of coal. Akron makes most of the auto tires used in the country.

Ohio's thousands of factories almost overshadow its importance in two other basic industries—mining and agriculture. Its fertile soil produces soy beans, corn, wheat, grapes, tobacco. Dairying is extensive. Mining is centered in coal, oil, sand and gravel and clay production.

Ohio is called the "Mother of Presidents," because it has sent to the White House

seven men, five of whom were elected from that state and two of whom were born in Ohio but elected from other states.

In 1749, Céleron, a French officer, reached the Ohio River from Canada and claimed the area for the French, disregarding the grants of the British Kings, which covered this area.

OKLAHOMA

Capital: Oklahoma City.

Governor: Johnston Murray (Dem., 1955).

Organized as territory: May 2, 1890.

Entered Union & (rank): Nov. 16, 1907 (46).

Present constitution adopted: 1907.

Motto: *Labor omnia vincit* (Labor conquers all things).

State flower: Mistletoe (1893).

State tree: Redbud (1937).

State bird: None.

State colors: Green and white (1915).

State song: "Oklahoma (A Toast)" (1935).

Nickname: Sooner State.

Origin of name: From two Choctaw Indian words meaning "red people."

1940 population & (rank): 2,336,434 (22).

1950 population & (rank): 2,233,351 (25).

1940-50 population change: -4.4%.

1940 area & (rank): 69,919 sq. mi. (17).

Geographic center: In Oklahoma Co., 8 mi. N of Oklahoma City.

Number of counties: 77.

Largest cities: Oklahoma City (242,450), Tulsa (180,586), Muskogee (37,255), Enid (35,976), Lawton (34,527).

State forests: None.

State parks: 7 (29,186 ac.).

State general revenue (1949): \$225,428,000.

State general expenditure (1949): \$225,732,000.

Oil has made Oklahoma a rich state and Tulsa one of the world's wealthiest cities per capita. The smelting of zinc, oil refining, meat packing and flour milling are its chief factory industries. Corn, oats, cotton, sorghums and potatoes are its agricultural crops of chief importance.

In 1834, Oklahoma was set aside as Indian Territory and remained so until noon, April 22, 1889, when it was opened up to homesteaders. On that one day, 50,000 people swarmed in and the term "sooners" was born to apply to those who had sneaked into the state sooner than the noon deadline. Today, Oklahoma has the biggest U. S. Indian population, 63,125 according to the 1940 census, many of whom are rich because of the oil discovered on their land. The state is one of the two in the nation which prohibits the sale of hard liquor.

Coronado entered Oklahoma in 1541 while searching for the mythical city of Quivira.

OREGON

Capital: Salem.

Governor: Douglas McKay (Rep., 1955).

Organized as territory: Aug. 14, 1848.

Entered Union & (rank): Feb. 14, 1859 (33).

Present constitution adopted: 1859.

Motto: The Union.

State flower: Oregon grape (1899).

State tree: Douglas fir (1939).

State bird: Western meadow lark (1927).

State song: "Oregon, My Oregon" (1927).

Nickname: Beaver State.

Origin of name: Probably from the Shoshoni

Indian words meaning "place of plenty."

1940 population & (rank): 1,089,684 (34).

1950 population & (rank): 1,521,341 (32).

1940-50 population change: +39.6%.

1940 area & (rank): 96,981 sq. mi. (9).

Geographic center: In Crook Co., 25 mi. E of S of Prineville.

Number of counties: 36.

Largest cities: Portland (371,011), Salem (43,064), Eugene (35,672), Medford (17,170), Corvallis (16,173).

State forests: 25 (523,000 ac.).

State parks: 162 (61,582 ac.).

State general revenue (1949): \$159,752,000.

State general expenditure (1949): \$154,807,000.

Oregon, with the greatest U. S. reserve of standing timber, lives on its lumber and fish. Its salmon fishing industry, centered at Astoria at the mouth of the Columbia River, is one of the world's largest. The state leads in growing hops and also raises nuts, wheat, hay, oats and potatoes. Mercury, chromite and antimony are mined in quantity.

Oregon's coast is lush and green with very heavy rainfall. Its factories produce lumber and food products, flour and machinery.

Bonneville Dam lies in Oregon and helps make the state a great source of electric power. Oregon was the first of the far-Western states to be settled without the help of a major gold rush.

Bruno Heceta, a Spaniard, in 1775, was the first white man known to have visited Oregon.

PENNSYLVANIA

Capital: Harrisburg.

Governor: John S. Fine (Rep., 1955).

Entered Union & (rank): Dec. 12, 1787 (2).

Present constitution adopted: 1874.

Motto: Virtue, liberty and independence.

State flower: Mountain laurel (1933).

State tree: Hemlock (1931).

State bird: Ruffed grouse (1931).

State colors: Blue and gold.

State song: None.

Nickname: Keystone State.

Origin of name: In honor of William Penn.

1940 population & (rank): 9,900,180 (2).

1950 population & (rank): 10,498,012 (3).

1940-50 population change: +6.0%.

1940 area & (rank): 45,333 sq. mi. (32).

Geographic center: In Center Co., 2 1/2 mi. SW of Bellefonte.

Number of counties: 67.

Largest cities: Philadelphia (2,064,794), Pittsburgh (673,763), Erie (130,125), Scranton (124,747), Reading (109,062).

State forests: 23 (1,675,211 ac.).

State parks: 109 (92,520 ac.).

State general revenue (1949): \$669,644,000.

State general expenditure (1949): \$679,997,000.

From the steel mills of Pittsburgh through the mid-state coal mines and oil wells to the shipyards and factories of Philadelphia, Pennsylvania bristles with heavy industry. Iron and steel are the state's trademarks.

Today about half of U. S. iron and steel is made in the Pittsburgh area. Electrical machinery, textiles, boilers, engines, knit goods, locomotives, wire, trucks, buses, silk products, blast furnaces and other heavy products are made in the countless factories of this state. Philadelphia is the second busiest port in the U. S. and was the third largest city in population in 1950. Pennsylvania contains virtually all the U. S. anthracite (hard coal) deposits. As a farmer the state stands high in buckwheat, tobacco, apples, potatoes, corn, wheat, barley, hay and peaches.

Pennsylvania is rich in historical lore. Philadelphia was the seat of the federal government almost continuously from 1776 until 1800, and there the Declaration of Independence was signed and the Constitution drawn up. Valley Forge, of the Revolution, and Gettysburg, the turning-point of the Civil War, are both in Pennsylvania. The Liberty Bell stands in Independence Square in Philadelphia.

Henry Hudson anchored in Delaware Bay during his trip up the Hudson in 1609 and gave the Dutch first claim to the state. In 1681, William Penn, the Quaker, founded its first colony.

RHODE ISLAND

Capital: Providence.

Governor: Dennis J. Roberts (Dem., 1953).

Entered Union & (rank): May 29, 1790 (13).

Present constitution adopted: 1843.

Motto: Hope.

State flower: Violet (unofficial).

State tree: Maple (unofficial).

State bird: Bobwhite (unofficial).

State colors: Blue, white and gold (in state flag).

Song: "Rhode Island" (1946).

Nickname: Little Rhody.

Origin of name: From the Greek island of Rhodes.

1940 population & (rank): 731,346 (36).

1950 population & (rank): 791,896 (36).

1940-50 population change: +11.0%.

1940 area & (rank): 1,214 sq. mi. (48).

Geographic center: In Kent Co., 1 mi. W of S of Crompton.

Number of counties: 5.

Largest cities: Providence (247,700), Pawtucket (81,180), Cranston (55,130), Woonsocket (50,186), Warwick (43,027).

State forests: 3 (3,407 ac.).

State parks: 38 (6,762 ac.).

State general revenue (1949): \$57,892,000.

State general expenditure (1949): \$57,602,000.

Little Rhode Island (it would fit into Texas 220 times), with the greatest density of population barring the District of Columbia, boasts the greatest per capita industrial output of all the states, and the bulk of its products comes from the textile mills of Pawtucket, Providence and Woonsocket. Providence is also one of the largest U. S. jewelry centers.

Though more than nine-tenths of the people live in the cities, the southern part of the state is interested in dairying and truck farming in spite of the sterility of the

boulder clay soil. Potatoes, corn, apples, oats and hay lead the crop list.

Newport is the site of the Naval War College and was long a show place for the luxurious summer homes built by some of New York's wealthiest people.

Roger Williams founded Providence, and subsequently Rhode Island, in 1636 after he had been banished from Massachusetts for nonconformance to religious doctrine. William Blackstone, a fugitive from Massachusetts, is reputed to have settled in what is now Cumberland, before this date.

SOUTH CAROLINA

Capital: Columbia.

Governor: James F. Byrnes (Dem., 1955).

Entered Union & (rank): May 23, 1788 (8).

Seceded from Union: Dec. 20, 1860.

Re-entered Union: July 13, 1868.

Present constitution adopted: 1895.

Mottoes: *Animus opibusque parati* (Prepared in minds and resources) and *Dum spiro spero* (While I breathe, I hope).

State flower: Carolina yellow jessamine (1924).

State tree: Palmetto tree (1939).

State bird: Carolina wren (1948).

State song: "Carolina" (1911).

Nickname: Palmetto State.

Origin of name: Same as for North Carolina.

1940 population & (rank): 1,899,804 (26).

1950 population & (rank): 2,117,027 (27).

1940-50 population change: +11.4%.

1940 area & (rank): 31,055 sq. mi. (39).

Geographic center: In Richland Co., 13 mi. SE of Columbia.

Number of counties: 46.

Largest cities: Columbia (85,949), Charleston (68,243), Greenville (57,932), Spartanburg (36,674), Rock Hill (24,472).

State forests: 4 (17,744 ac.).

State parks: 24 (37,688 ac.).

State general revenue (1949): \$128,645,000.

State general expenditure (1949): \$146,438,000.

Once primarily agricultural, South Carolina has built so many big cotton textile mills that today the state's factories double the output of its farms in cash value. Agriculture has not, however, been completely replaced and today its chief crops are cotton, tobacco, peaches, corn, hay, oats, sweet potatoes and peanuts which are enhanced by the recent development of modern soil-conservation methods. Charleston, the largest city and busiest seaport, makes asbestos, wood, pulp and steel products.

Civil War hostilities were started in this state at Charleston, when, on April 12, 1861, South Carolina men bombarded and captured Fort Sumter. It was in Charleston harbor, too, that the first submarine was used in warfare.

Vasquez de Ayllon, who came from Santo Domingo with about 500 settlers in 1526, made the first attempt to colonize this state but the expedition was later wiped out by Indians. In succeeding years, Spanish attempts were successful.

SOUTH DAKOTA

Capital: Pierre.

Governor: Sigurd Anderson (Rep., 1953).

Organized as territory: Mar. 2, 1861.

Entered Union & (rank): Nov. 2, 1889 (40).

Present constitution adopted: 1889.

Motto: I lead.

State flower: American pasqueflower (1903).

State tree: Black Hills spruce (1947).

State bird: Ring-necked pheasant (1943).

State animal: Coyote (1949).

State colors: Blue and gold (in state flag).

State song: "Hail! South Dakota" (1943).

Nicknames: Sunshine State; Coyote State.

Origin of name: Same as for North Dakota.

1940 population & (rank): 642,961 (38).

1950 population & (rank): 652,740 (40).

1940-50 population change: +1.5%.

1940 area & (rank): 77,047 sq. mi. (15).

Geographic center: In Hughes Co., 8 mi. NE of Pierre.

Number of counties: 68.

Largest cities: Sioux Falls (52,161), Rapid City (25,179), Aberdeen (20,976), Huron (12,713), Watertown (12,662).

State forests: 4 (84,000 ac.).

State parks: 38 (4,000 ac.).

State general revenue (1949): \$48,919,000.

State general expenditure (1949): \$49,020,000.

Seventy-five per cent of the population of South Dakota is actively interested in agriculture. Its leading crops are rye, barley, oats, corn, wheat. Cattle raising and dairying are its stronger industries. The state contains the richest U. S. gold mine, the Homestake, at Lead.

The Black Hills, a great tourist attraction, are the highest mountains east of the Rockies. Mt. Rushmore, in this group, is celebrated for the likenesses of Washington, Jefferson, Lincoln and Theodore Roosevelt, which were carved in stone by the late Gutzon Borglum. The Badlands offer very scenic masses of bare rock and clay unrelieved by any vegetation. It was in this state that the Sioux Indians, angered at the influx of the white men who were searching for gold, started the hostilities which ended in Custer's Massacre, on June 25, 1876, in Montana. South Dakota has the smallest county in the nation, Armstrong County, which had, in 1940, a population of forty-two and in the 1948 election, a recorded vote of seven, six votes being cast for Truman.

The French trader, Verendrye, entered this state in 1743, when he came down from Canada looking for a western ocean.

TENNESSEE

Capital: Nashville.

Governor: Gordon Browning (Dem., 1953).

Entered Union & (rank): June 1, 1796 (16).

Seceded from Union: June 24, 1861.

Re-entered Union: July 24, 1866.

Present constitution adopted: 1870.

Motto: Agriculture, commerce.

State flower: Iris (1933).

State tree: Tulip poplar (1947).

State bird: Mockingbird (1933).

Songs: "My Homeland, Tennessee" (1925) and "When It's Iris Time in Tennessee" (1935).

Nickname: Volunteer State.

Origin of name: From the name of the ancient capital of the Cherokee tribe.

1940 population & (rank): 2,915,841 (15).

1950 population & (rank): 3,291,718 (16).
 1940-50 population change: +12.9%.
 1940 area & (rank): 42,246 sq. mi. (33).
 Geographic center: In Rutherford Co., 5 mi. NE of Murfreesboro.
 Number of counties: 95.
 Largest cities: Memphis (394,012), Nashville (173,359), Chattanooga (130,333), Knoxville (124,183), Jackson (30,098).
 State forests: 9 (71,272 ac.).
 State parks: 11 (38,103 ac.).
 State general revenue (1949): \$207,148,000.
 State general expenditure (1949): \$223,380,000.

Tennessee won world prominence in 1945 for a single product—the atom bomb which was made at the Clinton Engineer Works at Oak Ridge. Aside from that distinction, Tennessee is predominantly agricultural and is affected by the steady trend toward industrialization of the South. Cotton, corn, wheat, oats, barley, hay, potatoes and peanuts are its important crops. Its industry is tied up with its agriculture, and cotton mills form the bulk of its industrial trend.

Tennessee is also the home of the TVA, that great enterprise of 13 dams (Norris being the largest) benefiting this state and six others (Kentucky, Alabama, North Carolina, Georgia, Virginia and Mississippi) in flood control, water power, navigation, electrical power. The artificial lakes created by this massive undertaking form a continuous body of water 650 miles long and make for excellent recreation, affording swimming, fishing, hunting and boating.

The Battle of Shiloh was fought in this state during the Civil War, and the fighting on Lookout Mountain was called "The battle above the clouds."

Hernando de Soto entered the state in 1541.

TEXAS

Capital: Austin.
 Governor: Allan Shivers (Dem., 1953).
 Entered Union & (rank): Dec. 29, 1845 (28).
 Succeeded from Union: Mar. 2, 1861.
 Re-entered Union: Mar. 30, 1870.
 Present constitution adopted: 1876.
 Motto: Friendship.
 State flower: Bluebonnet (1901).
 State tree: Pecan (1919).
 State bird: Mockingbird (1927).
 State song: "Texas, Our Texas" (1930).
 Nickname: Lone Star State.
 Origin of name: From an Indian word meaning "friends."
 1940 population & (rank): 6,414,824 (6).
 1950 population & (rank): 7,711,194 (6).
 1940-50 population change: +20.2%.
 1940 area & (rank): 267,339 sq. mi. (1).
 Geographic center: In McCulloch Co., 15 mi. NE of Brady.
 Number of counties: 254.
 Largest cities: Houston (594,321), Dallas (432,927), San Antonio (406,811), Fort Worth (277,047), El Paso (130,003).
 State forests: 5 (6,510 ac.).
 State parks: 10 (5,600 ac.).
 State general revenue (1949): \$463,227,000.
 State general expenditure (1949): \$441,915,000.

Big, sprawling, vigorous Texas, comprising one-twelfth of the entire area of the

United States, is the richest political subdivision in the world with the possible exception of the Russian Ukraine, and is the only state that may, by Congressional statute, divide into five parts if it so desires. There is very little possibility of this ever being done because Texas and Texans live by its bigness. Texas is a natural leader in production of oil, natural gas, cotton, beef cattle, helium, sulfur, sheep, wool, onions and turkeys.

The distance from El Paso to Beaumont is a greater distance than from New York to Chicago. Texas supports possibly the most ardent local enthusiasts in the nation, who are always quick to boast of her richness, beautiful girls, size.

Amarillo has the only U. S. helium plant; over the Neches River, at Port Arthur, is the most elevated highway bridge in the world. In Pecos County is the deepest hole in the world—an oil well that goes down 15,279 feet.

Cabeza de Vaca explored the state in 1528.

UTAH

Capital: Salt Lake City.
 Governor: J. Bracken Lee (Rep., 1953).
 Organized as territory: Sept. 9, 1850.
 Entered Union & (rank): Jan. 4, 1896 (45).
 Present constitution adopted: 1896.
 Motto: Industry.
 State flower: Sego Lily (1911).
 State tree: Blue spruce (1933).
 State bird: None.
 State emblem: Beehive.
 State song: "Utah, We Love Thee."
 Nickname: Beehive State.
 Origin of name: From the Ute tribe, meaning "people of the mountains."
 1940 population & (rank): 550,310 (41).
 1950 population & (rank): 688,862 (38).
 1940-50 population change: +25.2%.
 1940 area & (rank): 84,916 sq. mi. (10).
 Geographic center: In Sanpete Co., 3 mi. N of Manti.
 Number of counties: 29.
 Largest cities: Salt Lake City (181,718), Ogden (56,910), Provo (28,899), Murray (8,998), Orem (8,338).
 State forests: None.
 State parks: 3 (10 ac.).
 State general revenue (1949): \$67,515,000.
 State general expenditure (1949): \$69,133,000.

Utah, first in gold mining, and high in copper, silver, and lead, was probably the last U. S. area to be explored fully. Its deep twisting caverns and weird rock formation, with the largest natural bridges in the nation, suggest a wealth of geologic and ancient cultural lore that has only recently been looked into. The state's crops, requiring extensive irrigation, are sugar beets, potatoes, hay, onions and wheat. There is an extensive livestock industry.

Brigham Young led the Mormons into the area in 1847. Six times in the next forty years, the area applied for statehood and was refused because polygamy was practiced. In 1896, when polygamy was abandoned by the Mormon Church, Utah was admitted into the union.

Great Salt Lake, lying in the north central area, has long been a world wonder. It has no known outlet, and its salt content is about six times that of the ocean.

Utah offers some of the best hunting and fishing grounds in the West, with duck, deer, elk and pheasant abounding. Winter sports are being developed.

Spanish explorers in 1540 were probably the first whites in the area.

VERMONT

Capital: Montpelier.

Governor: Lee E. Emerson (Rep., 1953).

Entered Union & (rank): Mar. 4, 1791 (14).

Present constitution adopted: 1793.

Motto: Vermont—freedom and unity.

State flower: Red clover (1894).

State tree: Sugar maple (1949).

State bird: Hermit thrush (1941).

State song: "Hail to Vermont" (1937).

Nickname: Green Mountain State.

Origin of name: From the French, meaning "green mountain."

1940 population & (rank): 359,231 (46).

1950 population & (rank): 377,747 (45).

1940-50 population change: +5.2%.

1940 area & (rank): 9,609 sq. mi. (42).

Geographic center: In Washington Co., 3 mi. E of Roxbury.

Number of counties: 14.

Largest cities: Burlington (33,039), Rutland (17,647), Brattleboro (11,494), Barre (10,866), Montpelier (8,585).

State forests: 24 (68,936 ac.).

State parks: 21 (6,226 ac.).

State general revenue (1949): \$28,177,000.

State general expenditure (1949): \$32,065,000.

Vermont, the only New England state without a seacoast (and the last to be settled because of this), is a U. S. leader in the production of maple syrup and asbestos and sometimes the leader in marble and granite. In ratio to population, it keeps more dairy cows than any other state. Vermont's soil is largely devoted to truck farming and fruit growing, its rugged area precluding extensive farming. This same quality, however, along with a bracing dry climate, makes the state popular as a summer resort and as a center of winter sports. Two-thirds of the total land area of the state is classified as forest land.

From 1777 to 1791, Vermont was an independent republic with all national perquisites and then was the first state after the original thirteen to join the Union. It was also the first state to forbid slavery. Vermont has been Republican since 1856; only Georgia on the Democratic side ties that record for consistency.

Samuel de Champlain, in 1609, was the first white man to see the state.

VIRGINIA

Capital: Richmond.

Governor: John S. Battle (Dem., 1954).

Entered Union & (rank): June 25, 1788 (10).

Succeeded from Union: Apr. 17, 1861.

Re-entered Union: Jan. 27, 1870.

Present constitution adopted: 1902.

Motto: *Sic semper tyrannis* (Thus always to tyrants).

State flower: American dogwood (1918).

State bird: Cardinal.

State song: "Carry Me Back to Old Virginny" (1940).

Nicknames: The Old Dominion; Cavalier State.

Origin of name: In honor of Elizabeth, "Virgin Queen" of England.

1940 population & (rank): 2,677,773 (19).

1950 population & (rank): 3,318,680 (15).

1940-50 population change: +23.9%.

1940 area & (rank): 40,815 sq. mi. (35).

Geographic center: In Appomattox Co., 11 mi. S of E of Amherst.

Number of counties: 100, plus 24 independent cities.

Largest cities: Richmond (229,906), Norfolk (188,601), Roanoke (91,089), Portsmouth (71,294), Alexandria (61,604).

State forests: 6 (7,010 ac.).

State parks: 13 (19,026 ac.).

State general revenue (1949): \$197,853,000.

State general expenditure (1949): \$183,345,000.

Virginia is bound up with American history. Jamestown, founded in 1607, was the first permanent English settlement in North America; slavery was introduced in the state in 1619; the Revolutionary and Civil Wars were both ended in this state, and Virginia supplied seven of the first twelve Presidents.

Agriculture and tobacco are Virginia's mainstays. Apples, cotton, wheat, oats, potatoes, barley and sweet potatoes are her crops. Richmond makes more cigarettes than any other city in the world. Virginia's hams are world famous. There is a substantial livestock industry in southwest Virginia. Industry, particularly in the textile lines, is developing rapidly in this state.

Norfolk, together with Portsmouth and Newport News, makes up the Port of Hampton Roads, one of the nation's busy port areas.

Monticello, home of Jefferson; Mount Vernon, home of Washington; and Arlington National Cemetery bring visitors to this Old Dominion state annually.

The explorations of Sir Walter Raleigh, in 1584, were responsible for the birth of this state, which at that time included the entire Atlantic coast north of the Spanish settlements.

WASHINGTON

Capital: Olympia.

Governor: Arthur B. Langlie (Rep., 1953).

Organized as territory: Mar. 2, 1853.

Entered Union & (rank): Nov. 11, 1889 (42).

Present constitution adopted: 1889.

Motto: *Al-Ki* (Indian word meaning Bye and Bye).

State flower: Rhododendron (1949).

State tree: Hemlock (1947).

State bird: Goldfinch (unofficial).

State colors: Green and gold (1925).

State song: "Washington's Song" (1909).

Nicknames: Evergreen State; Chinook State.

Origin of name: In honor of George Washington.

1940 population & (rank): 1,736,191 (30).

1950 population & (rank): 2,378,963 (23).

1940-50 population change: +37.0%.

1940 area & (rank): 68,192 sq. mi. (19).

Geographic center: In Chelan Co., 10 mi. S of W of Wenatchee.

Number of counties: 39.

Largest cities: Seattle (462,440), Spokane (180,484), Tacoma (142,975), Yakima (38,375), Bellingham (33,934).

State forests: 2 (290,000 ac.).

State parks: 75 (54,594 ac.).

State general revenue (1949): \$284,194,000.

State general expenditure (1949): \$325,148,000.

Washington annually leads the nation in lumber production. Its rugged surface is rich in stands of Douglas fir, yellow and white pine, spruce, larch and cedar. The state's other first is apples. Food and lumber products and a wide variety of goods flow from Washington factories.

Grand Coulee Dam, built on the Columbia River for power and irrigation, provides the source of hydroelectric power (containing world's most powerful plant) that makes this state the owner of more electric lights per capita than any other in the nation. The Hanford Engineer Works, north of Pasco, was set up as the world's first full-scale plant for the making of atom bombs. The highest local average annual rainfall of 150.73 inches was set by Wynoochee Oxbow.

Bruno Heceta landed in Washington in 1775.

WEST VIRGINIA

Capital: Charleston.

Governor: Okey L. Patteson (Dem., 1953).

Entered Union & (rank): June 20, 1863 (35).

Present constitution adopted: 1872.

Motto: *Montani semper liberi* (Mountaineers always free).

State flower: Rhododendron (1903).

State tree: Sugar maple (1949).

State bird: Cardinal (1949).

State colors: Blue and gold (unofficial).

State songs: "West Virginia, My Home Sweet Home" (approved 1947 as one of songs of state); "West Virginia Hills" (by custom).

Nickname: Mountain State.

Origin of name: Same as for Virginia.

1940 population & (rank): 1,901,974 (25).

1950 population & (rank): 2,005,552 (29).

1940-50 population change: +5.4%.

1940 area & (rank): 24,181 sq. mi. (40).

Geographic center: In Braxton Co., 4 mi. E of Sutton.

Number of counties: 55.

Largest cities: Huntington (86,160), Charleston (72,818), Wheeling (58,447), Clarksburg (31,817), Parkersburg (29,510).

State forests: 7 (61,800 ac.).

State parks: 22 (35,275 ac.).

State general revenue (1949): \$151,620,000.

State general expenditure (1949): \$150,848,000.

Mountainous West Virginia is the coal mining leader of the nation. Geologists believe that if all other U. S. coal mines shut down, West Virginia alone could supply the country for 250 years with its deposits of

bituminous (soft) coal. The state also ranks high in natural gas, oil, quarry products and hardwood lumber. Wheat, corn, oats, hay, tobacco and fruit are the leading crops.

West Virginia was created when its residents refused to secede from the Union and severed itself from Virginia during the Civil War era. Like many mountain states, West Virginia has an equable climate without extremes. White Sulphur Springs, in Greenbrier County, is a famous health resort. Mountain streams give the state one of the highest U. S. water-power potentials.

In 1671, Captain Thomas Batts and a party from eastern Virginia probably were the first whites to see the area.

WISCONSIN

Capital: Madison.

Governor: Walter J. Kohler (Rep., 1953).

Organized as territory: Apr. 20, 1836.

Entered Union & (rank): May 29, 1848 (30).

Present constitution adopted: 1848.

Motto: Forward.

State flower: Violet.

State tree: Sugar maple.

State bird: Robin.

State animal: Badger.

State colors: Cardinal and white.

State song: "On Wisconsin" (unofficial).

Nickname: Badger State.

Origin of name: From the French corruption of an Indian word meaning "gathering of waters."

1940 population & (rank): 3,137,587 (13).

1950 population & (rank): 3,434,575 (14).

1940-50 population change: +9.5%.

1940 area & (rank): 56,154 sq. mi. (25).

Geographic center: In Wood Co., 9 mi. SE of Marshfield.

Number of counties: 71.

Largest cities: Milwaukee (632,651), Madison (95,594), Racine (70,749), Kenosha (54,360), Green Bay (52,443).

State forests: 8 (269,556 ac.).

State parks: 16 (14,258 ac.).

State general revenue (1949): \$261,284,000.

State general expenditure (1949): \$258,461,000.

Wisconsin is the first dairying state in the nation and leads in such items as number of dairy cattle, and production of cheese and butter and milk products. Until some forty years ago, when its forests were exhausted, Wisconsin was a leader in lumbering. It has since turned its attention to agriculture and manufacturing. The making of paper, autos, beer, machinery and furniture are its main factory interests. Cranberries, hemp, oats, rye and tobacco are its secondary agricultural pursuits. Its benign climate makes crop failure almost unheard of.

Wisconsin was the first state to have a workmen's-compensation law and, in 1934, a state unemployment-insurance law. Madison has the only U. S. forest-products laboratory, a reminder of its past interests. Its many lakes make it a favorite summer resort state.

Jean Nicolet, French explorer, seeking a northwest passage in 1634, was the first white man to see the state.

WYOMING

Capital: Cheyenne.
Governor: Frank A. Barrett (Rep., 1955).
Organized as territory: July 25, 1868.
Entered Union & (rank): July 10, 1890 (44).
Present constitution adopted: 1890.
Motto: *Cedant arma togae* (Let arms yield to the gown).
State flower: Indian paintbrush (1917).
State tree: Cottonwood (1947).
State bird: Meadow lark (1927).
State insignia: Bucking horse (unofficial).
State song: "Wyoming State Song" (unofficial).
Nickname: Equality State.
Origin of name: From the Indian, meaning "mountains and valleys alternating"; named after the Wyoming Valley in Pennsylvania.
1940 population & (rank): 250,742 (48).
1950 population & (rank): 290,529 (47).
1940-50 population change: +15.9%.
1940 area & (rank): 97,914 sq. mi. (8).
Geographic center: In Fremont Co., 58 mi. N of E of Lander.
Number of counties: 23, plus Yellowstone National Park.

Largest cities: Cheyenne (31,807), Casper (23,557), Laramie (15,497), Sheridan (11,402), Rock Springs (10,785).
State forests: None.
State parks: 7 (1,860 ac.).
State general revenue (1949): \$29,900,000.
State general expenditure (1949): \$30,983,000.

Wealthy in wool, cattle, oil and coal, Wyoming was first in U. S. history to insure woman's place in politics. In 1869, it gave women the vote and Mrs. Nellie Tayloe Ross, who held office in 1925-27, was the first U. S. woman governor.

Second in mean elevation to Colorado, Wyoming has many lures for the tourist trade, notably Yellowstone National Park. Cheyenne is famous for its annual "Frontier Days" celebration, which brings in visitors from everywhere. One of the world's largest subbituminous coal fields lies near Sheridan. Big game hunting is good in many parts of the state.

Trappers in 1812 were probably the first white men to settle this state, although John Colter, a member of the Lewis and Clark expedition, reached the northwest corner in 1807.

Self-governing U. S. Territories

ALASKA

Capital: Juneau.
Governor: Ernest Gruening (1953).
Organized as territory: 1912.
Territorial flower: Forget-me-not.
Territorial bird: Raven (unofficial).
Territorial song: "Alaska, My Alaska" (unofficial).
Origin of name: Corruption of native word meaning "great country."
1939 population: 72,524.
1950 prelim. population: 126,661.
1939-50 population change: +74.6%.
1940 area: 586,400 sq. mi. (incl. Aleutians).
Geographic center*: 95 mi. south of Fort Gibbon.
Largest cities: Anchorage (11,060), Juneau (5,818), Fairbanks (5,625), Ketchikan (5,202), Seward (2,063).
 * Including islands.

Alaska, the biggest, coldest and wildest of U. S. possessions (including the Aleutians from longitude 167° east of Greenwich) was called "Seward's Folly" in 1867, when that Secretary of State arranged for its purchase from Russia for \$7,200,000. Since then Alaska has paid for itself scores of times.

Canned salmon is Alaska's biggest product. It mines gold, supplies most of U. S. tin and also turns out copper, platinum, coal, oil, gypsum, limestone and marble. The Pribilof Islands, in the Bering Sea, are world famous as the breeding ground of the Alaska fur seal, which is under careful government control. Beaver, muskrat, otter, mink and other furs also abound.

Mt. McKinley, in the south central part, is 20,300 feet high, the tallest peak in North

America. With its wild interior, still partly unexplored, this territory is a hunter's paradise. With only one person for every five square miles, Alaska is by far the most thinly settled of U. S. lands. Sitka was its capital until 1906.

Alaska has magnificent glaciers and active volcanoes. Winter temperatures in the interior have been known to register 60° below zero. In June, 1912, the whole top blew off Mt. Katmai in the Aleutian range.

World War II brought to this territory a tremendous economic and physical expansion. In addition to the military personnel, thousands of construction workers were brought in to help build the chain of airports, naval bases, barracks, etc. Permanent improvements were effected in the form of additional highways, radio range stations and airports.

Alaska's Governor is appointed by the President to a 4-year term, and there is a locally elected 2-house legislature. The territory's delegate to the U. S. House of Representatives has floor privileges but no vote. Legislation is pending in Congress for the admission of Alaska as a state.

Vitus Bering, a Dane working for the Russians, and Alexei Chirikov discovered Alaska in 1741.

HAWAII

Capital: Honolulu (on Oahu).
Governor: Ingram M. Stainback.*
Organized as territory: 1900.
Motto: *Ua Mau Ke Ea O Ka Aina I Ka Pono* (The growth of the land is perpetuated by righteousness).
Territorial flower: Hibiscus.

Territorial song: "Hawaii Pono!" (unofficial).

Nickname: Paradise of the Pacific.

1940 population: 423,300.

1950 prelim. population: 493,437.

1940-50 population change: +16.6%.

1940 area: 6,454 sq. mi. (incl. outlying islands).

Counties: 4.

Largest cities: Honolulu (245,612), Hilo (27,019), Wahiawa (8,341), Kailua-Lanikai (7,715), Wailuku (7,411).

*Term was due to expire in 1950. However appointment or reappointment is being postponed pending Congressional action on statehood question.

Hawaii, 2,100 miles west-southwest of San Francisco, is a 390-mile chain of islets and 8 main islands—Hawaii, Kahoolawe, Maui, Lanai, Molokai, Oahu, Kauai, and Niihau. Kure (Ocean) Island, an uninhabited islet in the Leeward Islands, and Palmyra, in the Line Islands, are administratively part of Hawaii.

In addition, Baker, Canton, Enderbury, Howland, Jarvis, Johnston, Midway, and Wake are, for census purposes, part of Honolulu County, Hawaii; however, Hawaii has no jurisdiction over these islands.

Hawaii's temperature is mild and the soil is fertile for tropical fruits and vegetables. It grows 90 per cent of the world's pineapple.

Non Self-governing U. S. Territories

AMERICAN SAMOA

Capital: Pago Pago (on Tutuila).

Governor: Capt. Thomas F. Darden, Jr.

1940 population: 12,908.

1950 prelim. population: 18,602.

1940 area: 76 sq. mi.

American Samoa, a group of seven main volcanic or coral islands in the South Pacific, comprises the island of Tutuila and all the other islands of the Samoan Group east of longitude 171° west of Greenwich, including Aunu'u, Manua (Tau, Olosega and Ofu) and Swains Islands and Rose Atoll.

On Dec. 2, 1899, in a conference held in Washington, the U. S., Germany and Great Britain decided on the division of the Samoan Islands that held until World War I, after which New Zealand took possession of the German-mandated islands. In the 1900s, the high chiefs of the American group ceded possession to the U. S., and Congress accepted jurisdiction about twenty-five years later. The Governor is a naval officer appointed by the President.

The principal products are copra and mats woven from local grass and leaves.

BAKER, HOWLAND AND JARVIS

These Pacific islands were not to play a role in the extraterritorial plans of the U. S. until May 13, 1936, when the U. S. perfected its claim. President F. D. Roosevelt, at that time, placed them under the control of and jurisdiction by the Secretary of the Interior for administration purposes. For census purposes, they are in Honolulu County, Hawaii.

Baker Island is a rectangular atoll with an area of approximately one square mile

Cane sugar is its chief product and it also grows coffee, rice, cotton, bananas, nuts and potatoes. Some livestock is raised. In normal times, the tourist business is Hawaii's third biggest source of income. At least 86 per cent of the islands' population, although racially heterogeneous, is native born.

Hawaii's highest peak, Mauna Kea, rises to 13,784 feet and is, in a sense, the world's highest mountain since it springs from an ocean floor 18,000 feet below sea level. Kilauea, on Hawaii, is one of the world's most active volcanoes. The islands have no snakes and their only native mammal is a small bat of which there are hundreds of species.

Hawaii's Governor is appointed by the President to a 4-year term, and there is a locally elected 2-house legislature. The territory's delegate to the U. S. House of Representatives has floor privileges but no vote. Legislation is pending in Congress for the admission of Hawaii as a state.

Hawaii was discovered in 1778 by Captain James Cook, an Englishman, who named it the Sandwich Islands. It was ruled by native monarchs until 1898 when it ceded itself to the U. S.

and an elevation of twenty feet. It is about 1,880 miles from Hawaii.

Howland Island, a few miles to the north, is approximately one and a half miles long and half a mile wide and rises to an elevation of eighteen feet. Both these islands are near the crossing of the Equator and the International Date line.

Jarvis Island is several hundred miles to the east and is approximately two miles long by one and a half miles wide. It is slightly south of the Equator.

CANAL ZONE

Administrative center: Balboa Heights.

Governor: Brig. Gen. Francis K. Newcomber.

1940 population: 51,827.

1950 prelim. population: 52,300

1940 area: 553 sq. mi.

Fifty miles long and ten miles wide, with the Panama Canal traversing its middle, the Canal Zone is a protective belt of U. S. territory guarding the vital water link between the Atlantic and the Pacific Oceans.

The Canal Zone was granted to the U. S. by Panamá on Feb. 26, 1904, for \$10,000,000 outright and an annual payment of \$250,000, which was later increased to \$430,000. The canal was opened ten years later.

The history of the Canal goes back to 1534 when King Charles V of Spain ordered a survey made. In 1879 the French obtained canal rights but gave up after twenty-five years of unsuccessful work. The U. S. then bought the French rights for \$40,000,000 and set to work. The canal today measures 40.27 miles from shore line to shore line and 50.72 miles from deep water to deep water (Caribbean to Pacific). The railroad, run-

ning from Colón to Panamá City, covers 47.64 miles.

The locks making the climb from the Caribbean to the Pacific are Gatún Locks, Pedro Miguel Locks and Miraflores Locks, which have a total of six steps or levels. The locks are 1,000 feet long and 110 feet wide. Only U. S. Navy craft pass through free.

No private individuals are permitted to own land in the Canal Zone and the area is administered by a Governor appointed by the President of the U. S.

Work is now being done to permit the handling of vessels now barred because of their size.

CANTON AND ENDERBURY

Canton and Enderbury islands, the largest of the Phoenix group, are jointly owned and supervised by the U. S. and Great Britain after an agreement signed on Apr. 6, 1939. Canton is triangular in shape and the largest of the eight islands of this group. It lies approximately 1,600 miles southwest of Hawaii in the Pacific and was discovered at the turn of the eighteenth century by U. S. whalers. It was surveyed by Commander R. W. Meade who named it after a whaler ship. It had, in 1940, a population of forty. Enderbury is rectangular in shape and is 2.7 miles long by one mile wide. It had, in 1940, a population of four and it lies about thirty-two miles southeast of Canton. For census purposes, both islands are in Honolulu County, Hawaii.

GUAM

Capital: Agaña.

Governor: Carleton Skinner.

1940 population: 22,290.

1950 prelim. population: 58,754.

1940 area: 206 sq. mi.

Largest cities: Barrigada (11,532), Sinajana (9,159), Yigo (9,026), Dededo (6,333), Sumay (6,131).

Guam, the largest of the Mariana Islands, is independent of the trusteeship assigned to the U. S. in 1947. It was acquired by the U. S. from Spain in 1898 (occupied 1899) and was placed under Navy Department administration.

On Aug. 1, 1950, President Truman signed a bill which granted U. S. citizenship to the people of Guam and which established limited self-government. The civilian governor operates under supervision of the Department of the Interior.

The chief produce of the island is copra and coconut oil. For local consumption, bananas, pineapples, corn, pears, etc. are grown.

In World War II, Guam was seized by the Japanese on Dec. 11, 1941; but on July 27, 1944, it was once more under U. S. sovereignty.

JOHNSTON ISLAND

This island was originally discovered by Captain Charles James Johnston of H.M.S. *Cornwallis* on Dec. 14, 1867. On July 27, 1858, it was claimed by Hawaii and became a

possession of the U. S. The island is about 600 miles southwest of Hawaii and about one and a half miles long by half a mile wide. For census purposes, it is in Honolulu County, Hawaii.

KINGMAN REEF

This reef was discovered by Captain W. E. Kingman in Nov., 1853, and is the smallest land of U. S. sovereignty. It is 150 feet long by 120 feet wide at high tide. At low tide, two other islets of this atoll appear. It is approximately 1,000 miles south of Hawaii.

KURE (OCEAN) ISLAND. See HAWAII

MIDWAY

Midway, lying about 1,200 miles west-northwest of Hawaii, was discovered by Captain N. C. Brooks of the Hawaiian bark *Gambia* on July 5, 1859, in the name of the U. S. It was formally declared a U. S. possession in 1867, and in 1903 Theodore Roosevelt made it a naval reservation. Sand and Eastern Islands, with 850 acres and 328 acres respectively, are its largest individual islands. In 1935 it became a regular stopover for commercial transpacific flights. During the past war it was the scene of the first decisive defeat suffered by the Japanese. The total group comprises an area of twenty-eight square miles. For census purposes, it is in Honolulu County, Hawaii.

PALMYRA. See HAWAII

PUERTO RICO

Capital: San Juan.

Governor: Luis Muñoz Marín.

Song: "La Borinqueña."

1940 population: 1,869,255.

1950 prelim. population: 2,205,398.

1940 area: 3,435 sq. mi.

Puerto Rico, ninety-five miles long and at the northeast head of the Caribbean Sea, is a big cane sugar and rum producer and one of the most densely populated sections in the world. Other crops are cigars, citrus fruits, pineapples, rope and coffee.

The island was seized by the U. S. in 1898 in the Spanish-American War. It is administered by a Governor, who, as a result of a bill signed by President Truman on Aug. 5, 1947, is elected by popular vote, and a locally-elected Congress. There is also a Resident Commissioner in Washington with a voice in the House of Representatives but no vote.

The island was formerly known as Porto Rico, but in 1932, Congress made the present spelling official.

Columbus discovered Puerto Rico and Ponce de León conquered it for Spain in 1509.

VIRGIN ISLANDS

Capital: Charlotte Amalie (on St. Thomas).

Governor: Morris F. de Castro (acting).

1940 population: 24,889 (St. Croix, 12,902; St.

Thomas, 11,265; St. John, 722).

1950 prelim. population: 26,654.

1940 area: 133 sq. mi. (St. Croix, 82; St.

Thomas, 32; St. John, 19).

The Virgin Islands, lying east of Puerto Rico, are notable for making rum and entertaining tourists. They consist of about fifty islets and three main islands.

About 70 per cent of the population is Negro and there is limited farming, fishing and cattle raising. Vegetables, citrus fruits and coconuts are also raised. Virgin Islanders have U. S. citizenship and are ruled by a Governor appointed by the President.

The Danes took over the islands in 1671 and the U. S. bought them from Denmark for \$25,000,000 in 1917.

Columbus discovered the group in 1493 and named them for St. Ursula and the Eleven Thousand Virgins.

WAKE ISLAND

Wake Island, about halfway between Midway and Guam, is actually the three islets of Wilkes, Peale and Wake. They were discovered by the British in 1796 and annexed by the U. S. in 1898. The entire area comprises four square miles. In 1938, Pan American Airways established a seaplane base and it has been used as a commercial base since then. On Dec. 8, 1941, it was attacked by the Japanese, who finally took possession on Dec. 23. It was surrendered by the Japanese on Sept. 4, 1945.

It is uninhabited, and its area is included in that of Honolulu County, Hawaii.

U. S. Trusteeships

On April 2, 1947, the 134th meeting of the Security Council of the United Nations adopted and set up the Strategic Trust Territory of the Pacific Islands and assigned the Carolines, Marianas and Marshalls to the U. S. Congress approved the Measure on July 18, 1947. These islands had been originally purchased by Germany from Spain in 1899 and mandated to the Japanese after World War I.

The entire group comprises more than 1,400 islands but the total land area is only 846 square miles, many of the islands being tiny coral reefs. The Chamorros and Kanakas are the main racial groups, the former being less numerous but more advanced in living habits.

CAROLINE ISLANDS

The Carolines are divided into four administrative districts, Palau, Yap, Truk and Ponape, and the seat of administration is at Palau, whose chief island is Peleliu. Palau is in the western section and Truk in the eastern section of this archipelago. The islands are composed chiefly of volcanic rock and their peaks rise to 2,000 or 3,000 feet.

MARIANA ISLANDS

The Marianas were discovered by Magellan in 1521 and received their name in honor of Maria Anna of Austria in 1688. The main islands are Guam, Saipan, Rota, Tinian, Iwo Jima, and Asunción. Guam, the largest of

the islands, is independent of the trusteeship, having been acquired by the U. S. from Spain as a result of the Spanish-American War.

MARSHALL ISLANDS

The Marshall Islands were the seat of the U. S. experiments with the atomic bomb. Its main islands are Jaluit, the seat of administration, Elizabeth, Jabwat, Kwajalein, Bikini and Eniwetok. The Marshalls are the easternmost of the U. S. Trusteeships and are, opposed to the others, low islands of coral reef type and rise only a few feet above sea level. The chief crops are coconuts, copra, tortoise shells and fruits.

Definitions

Bicameral System—That form of government which consists of two separate houses or chambers in which the concurrence of both is necessary to the enactment of legislation. Adopted to act as a check upon hasty or ill-considered legislation.

Bloc—Originally a French term meaning mass and adopted in America to apply to a group of Congressmen who band together beyond party allegiances for a common cause. The most popularized bloc in America is the Agricultural Bloc.

CLOTURE (or closure)—A means of putting a stop to "filibustering" in which a two-thirds vote by the Senate followed by a petition of at least 16 members limits debate upon a bill to one hour and forces thereby an early vote.

Diplomatic Immunity—The exemption of a foreign diplomat, his staff and premises, from civil suit, arrest, taxation, search or seizure.

Proportional Representation—A system of

minority representation in proportion to the relative strength of a group. Voters indicate their choice by number in order of preference in such a manner that each party gets approximately the same proportion of legislators as their party vote bears to the total vote cast.

Referendum—The process of submitting to the people for vote any change in the Constitution, whether it be of the State or the Nation.

Senatorial Courtesy—A tacit agreement between the members of the Senate to follow the lead of those Senators representing the State in approvals or disapprovals of Presidential nominations for vacant positions. The rule is not applied to cabinet positions.

Unicameral—Pertaining to a legislative body that has only one body. In the United States the only State that operates under the Unicameral system is Nebraska.

ATLANTA, GA.

Incorporated as city: 1847.
 Mayor: William B. Hartsfield (Jan., 1954).
 1940 population & (rank): 302,288 (28).
 1950 prelim. population & (rank): 327,090 (32).
 1940-50 population change: +8.2%.
 1940 area: Land, 34.7 sq. mi.; inland water, 0.
 Altitude: Highest, 1,050 ft.; lowest, 940.
 Location: In NW central part of state, near Chattahoochee River.
 Counties: In Fulton and De Kalb Cos.; seat of Fulton Co.
 Churches: For whites, more than 330; for Negroes, more than 150.
 City-owned parks: 88 (1,600 ac.).
 Telephones: 193,248.
 Families with radios: 93,150.
 Television sets: 52,325.
 Radio stations: AM, 10; FM, 5.
 Television stations: 2.
 Assessed valuation (1949): \$528,707,436.00.
 City tax rate (1949): \$16 per \$1,000.
 Bonded debt (1949): \$27,034,500.00.
 Revenue (1949): \$18,784,109.14.
 Expenditure (1949): \$18,818,211.21.

One of the three largest paintings in the world is in Atlanta's Grant Park. The Cyclo-rama is 400 feet around, 50 feet high and weighs 13,000 pounds. It depicts one of the great moments of Atlanta's history—the Battle of Atlanta.

Atlanta was a strategic point for the Confederates in the Civil War—the chief base for recruiting and supplies in the far South, and the most important railway junction. The Battle of Atlanta, depicted in the Cyclo-rama, was fought on July 22, 1864, southeast of the city. General John B. Hood, commanding the Confederate forces, attacked General Sherman's army in an attempt to stop his progress through Georgia. The battle was inconclusive, the casualties terrific: an estimated 35,000. The two armies settled down to a siege which ended with the fall of Atlanta on Sept. 1.

General Sherman took possession of the city, rested his army until November, then burned Atlanta to the ground and started his devastating march to the sea.

Today Atlanta is one of the important financial and industrial centers of the Southeast. Its factories turn out 1,500 different commodities, including cotton goods, cottonseed oil, furniture and machinery. One of its best-known products is Coca-Cola, the formula for which was devised in an Atlanta home. It was first sold in 1886 at a little drugstore by the old town well. The present-day Coca-Cola plant in Atlanta, which is open to visitors, makes the syrup that supplies soda fountains and bottling plants throughout the Southeast.

BALTIMORE, MD.

Incorporated as city: 1797.
 Mayor: Thomas D'Alessandro, Jr. (May, 1951).
 1940 population & (rank): 859,100 (7).
 1950 prelim. population & (rank): 940,205 (6).
 1940-50 population change: +9.4%.
 1940 area: Land, 78.7 sq. mi.; inland water, 6.9.

Altitude: Highest, 445 ft.; lowest, sea level.
 Location: On upper Chesapeake Bay at mouth of Patapsco River.
 County: In Baltimore Co., but independent city.
 Churches: Protestant, 293 (115 colored); Roman Catholic, 64; Jewish, 55; others, 60.
 City-owned parks: 58 (5,060 ac.).
 Telephones: 192,592.
 Radio stations: AM, 9; FM, 5.
 Television stations: 3.
 Assessed valuation (1950): \$2,327,049,041.
 City tax rate (1950): \$2.88 per \$100.
 Net bonded debt (Jan. 1, 1950): \$147,687,478.47.
 Revenue (1949): \$141,235,335.86.
 Expenditure (1949): \$139,383,096.87.

Baltimore's fine harbor has made it the second port of the United States in foreign shipping tonnage. It has been an important port since the days of sailing vessels, and also a ship-building center. The Baltimore clipper was one of the best sailing ships of its day and was used extensively in world trade.

Baltimore was founded in 1729, and by 1797 was incorporated with a population of 20,000. During the War of 1812, the British fleet attacked Baltimore and bombarded Fort McHenry, at the entrance to the city's inner harbor, for twenty-five hours, beginning at dawn on Sept. 13, 1814. This bombardment was watched from the harbor by a young lawyer, Francis Scott Key, who had ventured out in a boat to ask the British to release a friend of his. When the British guns ceased firing, Key thought Fort McHenry had surrendered. But when daylight came, he saw the American flag still waving over the fort. The sight inspired him to write "The Star-Spangled Banner."

Fort McHenry has been restored to its appearance in the early nineteenth century, with officers' kitchen and mess rooms containing replicas of the artillery pieces used in 1812. The E. Berkeley Bowie collection of firearms is there, together with furniture of the period and a flag exhibit. It is open to the public.

In addition to its pioneer history in shipping, Baltimore was the home of the pioneer railroad in the United States—the Baltimore and Ohio—and the first railroad passenger and freight station, erected in 1830.

BIRMINGHAM, ALA.

Incorporated as city: 1871.
 Mayor: W. Cooper Green (Nov., 1953).
 1940 population & (rank): 267,583 (35).
 1950 prelim. population & (rank): 298,720 (37).
 1940-50 population change: +11.6%.
 1940 area: Land, 50.2 sq. mi.; inland water, 0.1.
 Altitude: Highest, 900 ft.; lowest, 565.
 Location: In N central part of state.
 County: Seat of Jefferson Co.
 Churches: Protestant, 162; Roman Catholic, 26; Jewish, 3.
 City-owned parks: 55 (1,053 ac.).
 Telephones: 124,935.
 Television sets: 15,250.

Radio stations: AM, 7; FM, 2.
 Television stations: 2.
 Assessed valuation (1950): \$290,000,000.
 City tax rate (1950): \$18 per \$1,000.
 Net bonded debt (May 1, 1950): \$15,189,732.
 Revenue (1950 budget): \$15,964,000.
 Expenditure (1950 budget): \$15,963,000.

Pioneer Southern aristocrats once lived in the heart of Birmingham, but the tide of commerce has swept over the city in the last half century. The beautiful residential districts and the stately homes have now moved to the hills south of the city. For Birmingham itself has been transformed into the "Pittsburgh of the South," the leading iron and steel manufacturing center—as it should be, since it was named for England's great steel-producing city. Huge steel mills and blast furnaces utilize the three natural resources—coal, iron ore and limestone—that are needed for steel. All are produced in the vicinity.

Other products of Birmingham's industries are heavy machinery, cement, freight cars, stoves, textiles. From Red Mountain, just southeast of the city, one can look down on the spectacular sight of flaming blast furnaces that light up the city and Jones Valley. In Vulcan Park, on US 31, at the top of Red Mountain, stands the iron statue of Vulcan, god of fire, created by Giuseppe Moretti from pig iron produced in the Birmingham area. The statue stands 53 feet high and weighs 60 tons.

BOSTON, MASS.

Incorporated as city: 1822.
 Mayor: John B. Hynes (Jan., 1952).
 1940 population & (rank): 770,816 (9).
 1950 prelim. population & (rank): 790,863 (10).
 1940-50 population change: +2.6%.
 1940 area: Land, 46.1 sq. mi.; inland water, 19.8.
 Altitude: Highest, 330 ft.; lowest, sea level.
 Location: On Massachusetts Bay, at mouths of Charles and Mystic Rivers.
 County: Seat of Suffolk Co.
 Churches: Protestant, 178; Roman Catholic, 80; Jewish, 40; others, 64.
 City-owned parks: 108 (821.29 ac.).
 Telephones: 295,000.
 Radio sets: 184,000.
 Television sets: 45,000.
 Radio stations: AM, 8; FM, 6.
 Television stations: 2.
 Assessed valuation (1950): \$1,567,500,000.
 City tax rate (1950): \$63 per \$1,000.
 Net bonded debt (July 1, 1950): \$78,128,347.93.
 Revenue (1949): \$112,147,928.18.
 Expenditure (1949): \$113,333,113.90.

No city in the U. S. is richer in historical associations than Boston, and no city has retained more of its original buildings as memorials to America's past.

Puritans from England settled at Boston in 1630, only ten years after the Pilgrims had landed at Plymouth in 1620. Fourteen years later, the pioneer Bostonians set aside the first public park in the U. S.—the Boston Common—for use as a "cow pasture and training field." The poet Emerson took his mother's cow there to graze. But certain

people did not enjoy the Boston Common, because they were put in the stocks for profaning the Sabbath and other errant ways. The Common now contains many monuments and tablets.

Fifteen years after the original settlement of Boston, the first free public school in America was opened in 1635. Today Boston and Cambridge (across the Charles River) not only have Harvard University, but also nine other prominent institutions of higher learning.

Following are some of the historic places still extant in Boston which recapitulate the city's great place in the annals of America:

(1) The Old State House, built in 1713 on the site of the first Town House (1658). In front of it occurred the Boston Massacre (1770) in which British troops fired on a mob of citizens, killing six and fanning the flames of revolt. A few years later the Declaration of Independence was proclaimed from the balcony.

(2) The Old South Meeting House, erected first in 1669 and rebuilt in 1729. Here Boston citizens gathered to decide the fate of the hated tea tax imposed by the British. The "Boston Tea Party" followed in 1773, and the British Parliament retaliated by closing the port. Two years later the British attempted to seize the colony's military stores at nearby Concord. In order to thwart the seizure, Paul Revere made his famous ride that opened the Revolutionary War.

(3) Paul Revere House is the oldest house in Boston, built about 1680 and bought by Paul Revere in 1770. It is now restored and furnished as it was in the days of Revere; and, like other historic places, it is open to the public.

(4) The Old North Church (1723), which is the oldest church building in Boston. Signal lanterns were displayed in the steeple to warn Paul Revere of the approach of the British.

(5) Faneuil Hall, the "Cradle of Liberty," which was the scene of stirring mass meetings during the revolutionary movement, and which was used by British officers as a theater during the occupation of the city. It now has historical paintings and a military museum.

Today Boston is the largest market of the shoe and leather industries in the world and also the largest wool market and the greatest fishing port in the U. S.

[For map of Boston, see p. 61.]

BUFFALO, N. Y.

Incorporated as city: 1832.
 Mayor: Joseph Mruk (Jan., 1954).
 1940 population & (rank): 575,901 (14).
 1950 prelim. population & (rank): 577,393 (15).
 1940-50 population change: +0.3%.
 1940 area: Land, 39.4 sq. mi.; inland water, 10.8.
 Altitude: Highest, 680 ft.; lowest, 571.
 Location: At east end of Lake Erie, on Niagara River.
 County: Seat of Erie Co.

Churches: Protestant, 268; Roman Catholic, 78; Jewish, 16; others, 34.
 City-owned parks: 14 (2,000 ac.).
 Telephones: 199,325.
 Radio sets: 290,000.
 Television sets: 62,192.
 Radio stations: AM, 6; FM, 5.
 Television stations: 1.
 Assessed valuation (1950): \$978,097,995.00.
 City tax rate (1950): \$29.89 per \$1,000.
 Bonded debt (1950): \$42,546,800.00.
 Revenue (1951, budget): \$52,502,773.39.
 Expenditure (1951, budget): \$52,502,773.39.

The first ship to sail the Great Lakes—the *Griffin*—was built near the present site of Buffalo by La Salle in 1679. Buffalo was still a relatively small town in 1813 when the British captured it and set its homes and buildings afire. Two years later, the town was rebuilt, and it began to thrive with the coming of the Erie Canal.

Today, Buffalo is the leading inland port of the U. S. in terms of the value of its commerce. The Great Lakes steamers connect it with Detroit, Chicago, and Duluth; and ships of foreign nations often visit its harbor. In addition, it is the second largest railroad center in the U. S. Both by water and by rail, Buffalo is a geographical middleman between the Midwest and the East. Much of the grain of the Midwest moves through the city, which can store in its elevators 57 million bushels of grain, chiefly wheat. This flow of wheat has made Buffalo one of the leading flour-milling and feed-manufacturing cities in the world.

Adjoining Buffalo is Niagara Falls, which for generations has been the favorite scenic spot of honeymooners. The Niagara River is divided by Goat Island and plunges over the escarpment in two parts: the American Falls, 167 feet high, and the Canadian Falls, 158 feet high. The famous *Maid of the Mist* boat takes visitors to the base of the falls. Visitors can also descend by elevator to the Cave of the Winds, which is behind the Central, or Bridal Veil, Falls.

CHICAGO, ILL.

Incorporated as city: 1837.
 Mayor: Martin H. Kennelly (Apr., 1951).
 1940 population & (rank): 3,396,808 (2).
 1950 prelim. population & (rank): 3,606,436 (2).
 1940-50 population change: +6.2%.
 1940 area: Land, 206.7 sq. mi.; inland water, 4.6.
 Altitude: Highest, 665 ft.; lowest, 581.
 Location: On lower west shore of Lake Michigan.
 County: Seat of Cook Co.
 Churches: Protestant, 1,650; Roman Catholic, 289; Jewish, 165.
 City-owned parks: 300 (8,557 ac.).
 Telephones: 1,510,184.
 Radio sets: 2,179,100.
 Television sets: 536,895.
 Radio stations: AM, 24; FM, 20.
 Television stations: 5.
 Assessed valuation (1949): \$8,075,604,000.
 City tax rate (1949): \$3.25 per \$100.
 Gross bonded debt (1949): \$375,000,000.
 Revenue (1949): \$295,538,041.20.
 Expenditure (1949): \$292,330,612.91.

The first white men known to have visited Chicago were Joliet and Marquette in 1673. Fort Dearborn, a blockhouse and stockade, was built in 1804, but was evacuated in 1812, with more than half of its garrison massacred at what is now the foot of 18th Street. Not until 1830 was the town laid out. Forty-one years later it was destroyed in the great fire.

Chicago today is the greatest slaughtering and meat-packing center in the world. Visitors to the Union Stock Yards can go on tours through the Armour plant and the Swift plant. Chicago also is one of the major grain-trading centers. There is a visitors' gallery overlooking the trading floor in the Chicago Board of Trade building, which is 44 stories and has an observatory 524 feet above the street. The Merchandise Mart, which covers two square blocks, is the second largest office building in the world, exceeded only by the Pentagon in Washington. Tours are conducted daily in which visitors can see showrooms of leading manufacturers of home goods. The city's factories turn out agricultural implements, electrical machinery and railway cars, among many other products.

Chicago stretches along the shore of Lake Michigan for 22 miles, and has many beaches and lake shore parks. The Chicago Natural History Museum ranks among the world's foremost museums of anthropology, botany, zoology and geology. It has the world's largest collection of meteorites, and is noted also for its dioramas of prehistoric man in the Hall of the Stone Age.

[For map of Chicago, see p. 60.]

CINCINNATI, OHIO

Incorporated as city: 1819.
 Mayor: Albert D. Cash (Dec., 1951).
 City Manager: W. R. Kellogg (Apptd. 1944).
 1940 population & (rank): 455,610 (17).
 1950 prelim. population & (rank): 500,510 (18).
 1940-50 population change: +9.9%.
 1940 area: Land, 72.4 sq. mi.; inland water, 0.
 Altitude: Highest, 820 ft.; lowest, 435.
 Location: In SW corner of state on Ohio River.
 County: Seat of Hamilton Co.
 Churches: Protestant, 495*; Roman Catholic, 108*; Jewish, 9*.
 City-owned parks: 84 (3,654 ac.).
 Telephones: 315,345*.
 Families with radios: 224,310*.
 Television sets: 80,500*.
 Radio stations: AM, 5*; FM, 4*.
 Television stations: 3.
 Assessed valuation (1949): Real property, \$701,737,480; personal, \$349,996,130.
 City tax rate (1949): \$11.70 per \$1,000.
 Bonded debt (1949): \$77,117,330.81.
 Revenue (1949): \$25,195,205.69.
 Expenditure (1949): \$25,278,248.20.

* Data for Hamilton Co.

Cincinnati began life in 1788 as a small settlement called Losantiville, perched on a plateau above the Ohio River. Its strategic location in the Western Territory led to the

building of Fort Washington, the most ambitious military establishment in the territory. The community that grew up around the fort was named Cincinnati, after the Society of Cincinnati which stemmed from Roman times.

The first legislature of the Northwest Territory met here in 1799 and elected as its delegate to Congress William Henry Harrison, who later became President of the U. S. A much later President, William Howard Taft, was born in a suburb of Cincinnati. The Taft Museum, which is open to the public every day, serves as a reminder of the family's role in the city's prominence. It contains an art collection donated by Mr. and Mrs. Charles P. Taft.

Cincinnati's industrial concerns include the Proctor and Gamble Soap Company, the Crosley Radio Corporation, the Gruen Watch Company, and the United States Playing Card Company, the largest establishment of its kind in the world.

CLEVELAND, OHIO

Incorporated as city: 1836.

Mayor: Thomas A. Burke (Nov., 1951).

1940 population & (rank): 878,336 (6).

1950 prelim. population & (rank): 905,636 (7).

1940-50 population change: +3.1%.

1940 area: Land, 73.1 sq. mi.; inland water, 0.

Altitude: Highest, 865 ft.; lowest, 573.

Location: On Lake Erie at mouth of Cuyahoga River.

County: Seat of Cuyahoga Co.

Churches: Protestant, 377; Roman Catholic, 87; Jewish, 36; others, 6.

City-owned parks: 35 (2,278 ac.).

Telephones: 517,795.

Radio sets: 1,125,000.

Television sets: 260,185*.

Radio stations: AM, 8; FM, 6.

Television stations: 3.

Assessed valuation (1949): \$1,734,380,642.

City tax rate (1949): \$32.70 per \$1,000.

Bonded debt (1949): \$112,129,000.

Revenue (1949): \$145,000,000.

Expenditure (1949): \$133,000,000.

* In northern Ohio; 80% in Metropolitan Cleveland.

The largest city in Ohio and sixth in the U. S., Cleveland was founded in 1796 by General Moses Cleaveland, who was the head surveyor of the Connecticut Land Company. This company had bought three million acres in what is now northern Ohio, paying 40 cents an acre. An acre in downtown Cleveland today would bring some two million dollars.

Cleveland is an important Great Lakes shipping point and the site of iron and steel manufacturing. Other products include paints, varnishes, electrical appliances, chemicals, and automobile parts.

In addition to industry, Cleveland is interested in cultural developments. It has the only municipally owned and operated dramatic project in the country—Cain Park Theatre, in suburban Cleveland Heights, having its season in summer and early autumn. The Cleveland Orchestra, which is nationally

known, gives informal pop concerts in the summer and a regular series in the winter.

In the Cleveland Cultural Gardens, a mile-long strip of park area, more than thirty nationality groups represented in Cleveland's population are creating gardens as memorials to peace.

DALLAS, TEX.

Incorporated as city: 1871.

Mayor: Wallace Savage (May, 1951).

City Manager: Charles C. Ford (apptd. 1950).

1940 population & (rank): 294,734 (31).

1950 prelim. population & (rank): 432,927 (22).

1940-50 population change: +46.9%.

1940 area: Land, 40.6 sq. mi.; inland water, 1.2.

Altitude: Highest, 500 ft.; lowest, 390.

Location: In NE part of state, on Trinity River.

County: Seat of Dallas Co.

Churches: 500.

City-owned parks: 80 (5,721 ac.).

Radio sets: 336,000.

Television sets: 55,000.

Radio stations: AM, 7; FM, 3.

Television stations: 2.

Assessed valuation (1950): \$676,000,000.

City tax rate (1950): \$1.85 per \$100.

Net bonded debt (Oct. 1, 1950): \$74,180,891.

Revenue (1951, budget): \$27,669,336.

Expenditure (1951, budget): \$27,669,336.

The Dallas Cotton Exchange handles about two million bales of cotton a year in normal times. The city produces more cotton gins than any other city in the world.

Dallas is also pre-eminent in the production of saddlery and harness and leather goods, and ranks third in the distribution of farm implements.

The Fair Park in East Dallas, is a \$15-million permanent exposition plant, open as a city park. It is the home of the annual State Fair. Its Hall of State is a shrine to Texas heroes and contains two of the world's largest murals.

DENVER

Incorporated as city: 1861.

Mayor: Quigg Newton (June, 1951).

1940 population & (rank): 322,412 (24).

1950 prelim. population & (rank): 412,856 (24).

1940-50 population change: +28.1%.

1940 area: Land, 57.9 sq. mi.; inland water, 0.8.

Altitude: Highest, 5,470 ft.; lowest, 5,130.

Location: In NE central part of state, on South Platte River.

County: Coextensive with Denver Co.

Churches: Protestant and miscellaneous, 285;

Roman Catholic, 27; Jewish, 16.

City-owned parks: 42 (1,634 ac.).

City-owned mountain parks: 30 (20,897 ac.).

Families with telephones: 113,783.

Families with radios: 105,600.

Radio stations: AM, 6; FM, 3.

Television stations: None.

Assessed valuation (1949): \$577,255,900.

City tax rate (1950): \$50.93 per \$1,000.

Bonded debt (1950): \$13,252,500.

Revenue (1950): \$19,920,137.

Expenditure (1950): \$19,400,000.

A traveler going west across the U. S. crosses the great plains and comes upon Denver lying just at the foot of the Rocky Mountains. The city was born in 1858 when gold was discovered in the sands of Cherry Creek. It began as a tough village of cabins, shacks and tents.

Denver now is the cultural and transportation center of a vast Rocky Mountain region. Its important industries include meat packing plants, flour mills and factories making tires, saddlery and porcelain.

No other city in the country has such a magnificent system of mountain parks. The nearest is 13 miles from the city, and the farthest limit of the park system extends 50 miles to the west. The main circle drive winds up Lookout Mountain to the top where the rock tomb of Buffalo Bill is situated, along with the Cody Museum. The municipal game preserve has herds of buffalo, elk and deer.

The most spectacular view of the region is obtainable from Mount Evans, 14,260 feet, which is reached by a scenic drive that is the highest automobile road in North America. Other drives through some of the grandest scenery of the Rockies are to Colorado Springs, to the south, and to Estes Park, which is the eastern entrance to Rocky Mountain National Park.

DES MOINES, IOWA

Incorporated as city: 1857.

Mayor: A. B. Chambers (Apr., 1954).

City Manager: Leonard G. Howell (Apptd. 1950).

1940 population & (rank): 159,819 (55).

1950 prelim. population & (rank): 176,954 (54).

1940-50 population change: +10.7%.

1940 area: Land, 53.8 sq. mi.; inland water, 0.

Altitude: 861 ft.

Location: In south central part of state, at junction of Raccoon and Des Moines Rivers.

County: Seat of Polk Co.

Churches: Protestant, 107; Roman Catholic, 10; Jewish, 4.

City-owned parks: 57 (1,613.25 ac.).

Telephones: 85,000.

Radio sets: 175,800.

Television sets: Over 2,000.

Radio stations: AM, 6; FM, 2.

Television stations: None.

Assessed valuation (1949): \$169,937,431.

City tax rate (1949): \$23.801 per \$1,000.

Bonded debt (1949): \$7,102,050.

Revenue (1950): \$9,300,974.

Expenditure (1950): \$7,053,263.

Des Moines sits at the heart of a prairie state, Iowa, which has more land under cultivation, in proportion to its area, than any other state. More corn is produced in Iowa than in any other area of equal size in the world—one-fifth of the corn crop of the U. S. More hogs are raised in Iowa than in any other state, and Iowa is second only to Texas in the number of cattle.

Iowa's eastern boundary is formed by the Mississippi River. The first white men known to have crossed the river and visited Iowa were Marquette and Joliet, French explorers,

in 1673. But it was not until 1833, after Iowa had come into U. S. possession by the Louisiana Purchase, that a strip of land west of the Mississippi was opened to white settlement. Des Moines was not settled for another 12 years, and became the capital of Iowa in 1857.

Although Iowa as a whole is agricultural, Des Moines is surrounded by rich coal fields on both sides of the Des Moines River. The coal has contributed to the industrial development of the city, which has almost 300 manufacturing plants.

DETROIT, MICH.

Incorporated as city: 1824.

Mayor: Albert E. Cobo (Jan., 1952).

1940 population & (rank): 1,623,452 (4).

1950 prelim. population & (rank): 1,838,517 (5).

1940-50 population change: +13.2%.

1940 area: 137.9 sq. mi.; inland water, 4.1.

Altitude: Highest, 685 ft.; lowest, 574.

Location: In SE part of state, on Detroit River.

County: Seat of Wayne Co.

Churches: Protestant, 690; Catholic, 250; Jewish, 8.

City-owned parks: 221 (4,748 ac.).

Telephones: 844,110.

Radio sets: 700,000.

Television sets: 306,420.

Radio stations: AM, 6; FM, 10.

Television stations: 3.

Assessed valuation (1950): \$3,953,197,530.

City tax rate (1950): \$22.334 per \$1,000.

Net bonded debt (June 30, 1950): \$251,770,000.

Revenue (1950): \$224,575,612.

Expenditure (1950): \$229,721,028.

Detroit is the oldest city of any size west of the seaboard colonies, having been founded in 1701, more than a century before Chicago was founded. The French were the settlers, and they gave the city its name from their word meaning "strait." They referred to the 27-mile-long Detroit River which connects Lake Erie and Lake St. Clair. The river forms part of the international boundary, and marks the only point where Canada lies directly south of U. S. territory.

Because of its strategic location, Detroit was fought over by the French, the British and the Indians. During the Revolutionary War, it served as headquarters for the British forces in the Northwest. The first steam vessel, the *Walk-in-the-Water*, made its appearance on the Great Lakes in 1818, and Detroit was the western terminus for most of its voyages from Buffalo. Today hundreds of ships, carrying the immense commerce of the Great Lakes, call at Detroit and link it by water to all the important cities on the Great Lakes. Detroit ranks fourth in the U. S. as an exporting port.

No other city in the world equals Detroit as an automobile-manufacturing center. The plants include Ford, Cadillac, Hudson, Packard, Chrysler and Kaiser-Frazer. Most of the plants are open for public tours. Apart from automobiles, Detroit manufactures a wide range of products—adding machines, pharmaceuticals, steel barrels, television equipment.

Belle Isle, a thousand-acre park in the Detroit River, has bathing and boating facilities, tennis and golf, zoological gardens and an aquarium.

HARTFORD, CONN.

Incorporated as city: 1784.
 Mayor: Cyril Coleman (Dec., 1951).
 City Manager: Carleton F. Sharpe (Apptd. 1948).
 1940 population & (rank): 186,267 (51).
 1950 prelim. population & (rank): 177,073 (53).
 1940-50 population change: +6.5%.
 1940 area: Land, 17.4 sq. mi.; inland water, 1.2.
 Location: In central part of state, on Connecticut River.
 County: Seat of Hartford Co.
 Churches: Protestant, 94; Roman Catholic, 14; Jewish, 6.
 City-owned parks: 29 (2,800 ac.).
 Radio stations: AM, 6; FM, 2.
 Television stations: None.
 Assessed valuation (1949): \$447,141,111.
 City tax rate (1950): \$37.50 per \$1,000.
 Net bonded debt (Mar. 31, 1950): \$7,167,185.
 Revenue (1950): \$20,024,970.
 Expenditure (1950): \$19,540,086.

A Dutch trading post, established in 1623, was the beginning of Hartford. Thirteen years later, English colonists from Cambridge, Mass., started a permanent settlement and soon afterward made it the capital of the Colony of Connecticut.

The Dutch were expelled from Connecticut in 1654, but Hartford's troubles were not over. In 1687, the Governor of New York appeared at Hartford and demanded the Connecticut charter, on the grounds that he was Governor General of New England, too. The charter was hidden in a hollow oak tree for two years until King William III recognized it as valid.

By now, Hartford has become the greatest insurance center in the nation: 45 companies have their headquarters there, and their combined assets exceed \$3 billion. In addition, Hartford is the home of the largest type-writer manufacturers in the world—Underwood and Royal. Its chief newspaper, *The Hartford Courant*, is the oldest in America; an earlier subscriber was George Washington, and Israel Putnam was its war correspondent during the Revolution.

Historical treasures are kept in the State Library and Supreme Court Building. Among them are a full-length portrait of Washington by Gilbert Stuart; the original charter signed by Charles II; the Brandegee collection of portraits of U. S. Justices; and the Joseph C. Mitchelson collection of coins, bills and commercial tokens of interest to students of numismatics.

HOUSTON, TEX.

Incorporated as city: 1837.
 Mayor: Oscar F. Holcombe (Jan., 1951).
 1940 population & (rank): 384,514 (21).
 1950 prelim. population & (rank): 594,321 (14).
 1940-50 population change: +54.6%.
 1940 area: Land, 72.8 sq. mi.; inland water, 0. Altitude: Highest, 74 ft.; lowest, sea level.

Location: In SE part of state, near Gulf of Mexico.

County: Seat of Harris Co.
 Churches: Over 500.
 City-owned parks: 65 (2,700 ac.).
 Telephones: 275,000.
 Radio sets: 300,000*.
 Television sets: 35,000*.
 Radio stations: AM, 8; FM, 4.
 Television stations: 1.
 Assessed valuation (1949): \$768,866,360; (1950 est.): \$915,000,000.
 City tax rate (1950): \$1.975 per \$100.
 Bonded debt (1949): \$59,438,642.
 Revenue (1949): \$24,139,897.
 Expenditure (1949): \$34,086,392.

* Houston area.

Sam Houston was the commander in chief of the Texas troops who fought a successful war of rebellion against domination by Mexico, which had been in possession of Texas. On April 21, 1836, Houston's men won a decisive victory in which the Mexican general, Santa Anna, was taken prisoner, and signed the treaty which launched the Republic of Texas. In September, a constitution was ratified, and Houston was elected President. The Texas Republic was recognized by the U. S. and by the major European powers.

The present city of Houston, which is the largest in Texas, honors Sam Houston, who was president of the erstwhile republic. This was its first capital. Today great industrial establishments line Houston's ship channel. The city leads all others in America in cotton exports. It is one of America's outstanding oil-producing and refining centers, and leads the world in the manufacture and distribution of oil-industry equipment. Among the new industries that are being developed in Houston are synthetic rubber and chemicals.

INDIANAPOLIS, IND.

Incorporated as city: 1874.
 Mayor: Al Feeney (Dec., 1951).
 1940 population & (rank): 386,972 (20).
 1950 prelim. population & (rank): 424,683 (23).
 1940-50 population change: +9.7%.
 1940 area: Land, 53.6 sq. mi.; inland water, 0.1.
 Altitude: Highest, 816 ft.; lowest, 667.
 Location: In central part of state, on West Fork of White River.
 County: Seat of Marion County.
 Churches: 515.
 City-owned parks: 32 (3,519 ac.).
 Telephones: 203,644.
 Radio sets: 135,780 (radio families).
 Television sets: 90,000.
 Radio stations: AM, 5; FM, 1.
 Television stations: 1.
 Assessed valuation (1949): \$496,915,240.
 City tax rate (1949): \$4.412 per \$100.
 Gross debt (Dec. 31, 1948): \$6,804,000.
 Revenue (1948): \$11,620,000.
 Expenditure (1948): \$12,638,000.

Indianapolis is the largest city in the United States which is not on navigable water. Its size and extensive trade is based on the rich territory surrounding it. The cornfields of the region make Indianapolis the second corn market in the United States.

There are also in the region large coal fields and deposits of building stone and marl.

The Indianapolis Motor Speedway, five miles from the center of the city, was built in 1909 as a proving ground for automobiles. Each Memorial Day a 500-mile race is held there. Various well-known improvements in automobiles are credited to the experience gained on the speedway. Among them are the rear-vision mirror, the balloon tire and ethyl gasoline.

The homes of two famous citizens of Indianapolis are preserved as memorials. One is the home of James Whitcomb Riley, which is preserved as it was when the famous Hoosier poet lived there. The other is the home Benjamin Harrison built in 1872. He lived there except for the period of his service as United States Senator, and as the twenty-third President of the United States. Much of the furniture is original. Both these homes are open to the public at a small fee.

JERSEY CITY, N. J.

Incorporated as city: 1855.

Mayor: John V. Kenny (May, 1953).

1940 population & (rank): 301,173 (30).

1950 prelim. population & (rank): 300,447 (36).

1940-50 population change: -0.2%.

1940 area: Land, 14.3 sq. mi.; inland water, 7.2.

Altitude: Highest, 180 ft.; lowest, sea level.

Location: In NE part of state, on Hudson

River and Upper New York Bay.

County: Seat of Hudson Co.

Churches: Protestant, 96; Roman Catholic, 39;

Jewish, 17; Others, 45.

Telephones: 83,876.

Radio stations: None.

Television stations: None.

Assessed valuation (1949): \$374,703,907.

City tax rate (1949): \$69.96 per \$1,000.

Bonded debt (1949): \$45,867,600.

Revenue (1949): \$49,199,781.26.

Expenditure (1949): \$43,620,937.94.

LOS ANGELES, CALIF.

Incorporated as city: 1850.

Mayor: Fletcher Bowron (June, 1953).

1940 population & (rank): 1,504,277 (5).

1950 prelim. population & (rank): 1,957,692 (4).

1940-50 population change: +30.1%.

1940 area: Land, 448.3 sq. mi.; inland water, 3.9.

Altitude: Highest, 2,785 ft.; lowest, sea level.

Location: In SW part of state, on Pacific Ocean.

County: Seat of Los Angeles Co.

Churches: 1,200.

City-owned parks: 104 (7,921 ac.).

Telephones: 793,758.

Radio sets: 1,056,774 (county).

Television sets: 614,064 (county).

Radio stations: AM, 12; FM, 10.

Television stations: 7.

Assessed valuation (1950): \$2,480,144,170

City tax rate (1950): \$1.7857 per \$100.

Gross debt (Dec. 31, 1948): \$208,567,000.

Revenue (1949): \$291,160,821.34.

Expenditure (1949): \$315,998,455.91.

In 1781, the Mexican Provincial Governor, Filipe de Neve, founded "El Pueblo de Nuestra Señora la Reina de Los Angeles"—mean-

ing "The Village of Our Lady, the Queen of the Angels." The pueblo became the capital of a Mexican province, and it was the last place to surrender to the U. S. at the time of the American occupation in 1847.

Los Angeles now is the largest in population of any city in California, and is the largest in area of any city in the U. S. surpassing New York City by 87 square miles. Its phenomenal growth has been due to four main factors:

(1) The equable climate, which has attracted thousands of people from the Midwest.

(2) Development of the citrus-fruit industry. Around Los Angeles is a great arc of orange groves to a radial extent of thirty miles or more. Grapefruit and lemon groves are interspersed.

(3) Oil fields. Both to the north of Los Angeles, in the Bakersfield region, and to the south, in the San Pedro region, forests of oil derricks proclaim the discovery and exploitation of vast fields of underground wealth.

(4) The motion-picture industry, which is situated in Hollywood. More than two-thirds of all motion pictures are produced in the Los Angeles metropolitan district.

Among the unusual industries in Los Angeles is the Ostrich Farm, near the entrance to Lincoln Park. Ostriches are raised for their feathers and to supply zoos and motion-picture studios. The farm is open to visitors. There is also the California Alligator Farm, adjoining the ostrich farm, where hundreds of alligators are on exhibition, including trained ones.

Exposition Park has a 7-acre sunken garden containing 15,000 rosebushes of 120 varieties. The 1932 Olympic Games were held in the coliseum there, which seats 101,671 persons. The California State Exposition Building has exhibits and dioramas showing the resources, industries and recreational facilities of California.

Adjoining Los Angeles, within a few minutes by bus or car, is Pasadena, which has the famous New Year's Day Tournament of Roses—a 2½-hour floral parade that attracts more than a million visitors. Also nearby is San Marino, which has the Henry E. Huntington Library and Art Gallery.

Well-known beaches within easy driving range of Los Angeles include: Malibu, Santa Monica, Venice, Hermosa, Redondo and Long Beach.

[For map of Los Angeles, see p. 58.]

MEMPHIS

Incorporated as city: 1849.

Mayor: S. Watkins Overton (Jan., 1952).

1940 population & (rank): 292,942 (32).

1950 prelim. population & (rank): 394,012 (26).

1940-50 population change: +34.5%.

1940 area: Land, 45.6 sq. mi.; inland water, 2.9.

Altitude: Highest, 320 ft.; lowest, 195.

Location: In SW corner of state, on Mississippi River.

County: Seat of Shelby Co.
 City-owned parks: 54 (1,796.45 ac.).
 Telephones: 144,145.
 Radio sets: 60,000.
 Television sets: 44,319.
 Radio stations: AM, 6; FM, 2.
 Television stations: 1.
 Assessed valuation (1950): \$420,000,000.
 City tax rate (1950): \$1.80 per \$100.
 Bonded debt (1949): \$28,315,000.
 Revenue (1949, budget): \$10,178,222.85.
 Expenditure (1949, budget): \$10,643,804.53.

One of the country's largest inland ports, Memphis handles more than 4 million bales of cotton a year, making it the biggest single cotton market in the world. It likewise ranks first in the world as a market for hardwood lumber. And as a lesser activity, it is a leading mule market.

The first settlers of Memphis were the Chickasaw Indians, who had a village named Chisca there on the bluffs overlooking the Mississippi River. Hernando de Soto, in 1541, is said to have had his first glimpse of the Mississippi from the site of Memphis; and in the next century, Joliet and Marquette stopped there to trade with the Indians. La Salle tried to claim the region for France in 1682 and built a fort.

Actually the city was not settled until 1819, after Tennessee had been taken into the Union in 1796. One of the three founders of Memphis was Andrew Jackson. During the Civil War, the federal forces won a gunboat battle on the river at Memphis, and General Sherman was enabled to take the city. Confederate Park today contains ramparts from which Confederate soldiers defended the city against the federal gunboats.

MIAMI, FLA.

Incorporated as city: 1896.
 Mayor: William Wolfarth (Nov., 1951).
 City Manager: O. P. Hart (apptd. 1948).
 1940 population & (rank): 172,172 (48).
 1950 prelim. population & (rank): 246,983 (42).
 1940-50 population change: +43.5%.
 1940 area: Land, 30.3 sq. mi.; inland water, 7.8.
 Altitude: Average, 10 ft.
 Location: In SE part of state, on Biscayne Bay.
 County: Seat of Dade Co.
 Churches: 235.
 City-owned parks: 48 (613 ac.).
 Telephones: 175,371.
 Radio sets: 150,000.
 Television sets: 40,000.
 Radio stations: AM, 6; FM, 4.
 Television stations: 1.
 Assessed valuation (1950-51): \$502,804,780.
 City tax rate (1950-51): \$22.55 per \$1,000.
 Bonded debt (1950-51): \$19,151,000.
 Revenue (1951, budget): \$16,805,235.
 Expenditure (1951 budget): \$16,805,235.

For the variety and quantity of its sports events, Miami can lay claim to being the most athletic city in the nation. In the matter of fishing, for example, there is a winter tournament that begins about the

middle of January and runs through April; then comes a summer tournament that runs from July to early September. There are jai-alai games nightly from Christmas into April. There is greyhound racing on three tracks from December into March.

In case these events are not enough for the thousands of tourists who flock to Miami, there is the Orange Bowl football game on New Year's Day—followed by an open golf tournament—followed by a dinghy regatta—followed by a general sailing regatta in March. And there are horse races at Hialeah Park and Tropical Park from mid-December until April. Hialeah is noted as one of the most beautiful horse-racing tracks in the world, with its coconut palms, its tropical gardens, and the largest flock of flamingoes in Florida.

Miami is the southernmost large city on the U. S. mainland. To the south, a unique overseas highway goes down the Florida Keys to Key West, connecting the islands by bridges. To the west, the Tamiami Trail leads across the Everglades to Tampa.

MILWAUKEE, WIS.

Incorporated as city: 1846.
 Mayor: Frank P. Zeidler (April, 1952).
 1940 population & (rank): 587,472 (13).
 1950 prelim. population & (rank): 632,651 (13).
 1940-50 population change: +7.7%.
 1940 area: Land, 43.4 sq. mi.; inland water, 0.
 Altitude: Highest, 740 ft.; lowest, 581 ft.
 Location: In SE part of state, on Lake Michigan.
 County: Seat of Milwaukee Co.
 Churches: 374.
 City-owned parks: 65 (1,612 ac.).
 Telephones: 312,400.
 Radio sets: 190,279.
 Television sets: 90,000.
 Radio stations: AM, 8; FM, 3.
 Television stations: 1.
 Assessed valuation: (1949): \$1,161,750,840.
 City tax rate (1949): \$30.38 per \$1,000.
 Gross debt (Dec. 31, 1948): \$2,795,000.
 Revenue (1948): \$52,223,000.
 Expenditure (1948): \$51,374,000.

French missionaries visited the site of Milwaukee in the seventeenth century, but it was not until 1795 that Jacques Vieau established a trading post there. The first permanent white settler, Vieau's son-in-law, Solomon Juneau, made his home there in 1818.

Famous for its beer, Milwaukee has the Pabst, Schlitz and Blatz breweries, all of which are open to visitors by appointment. In addition the city is a substantial manufacturing center, producing machinery, chemicals, food and leather products, among others.

A Wisconsin State Fair, held annually in August, includes a state art exhibit and automobile and horse racing. The Milwaukee Auditorium is one of the largest exposition buildings in the country, with eight separate auditoriums under one roof, the smallest seating 300 and the largest 10,000.

MINNEAPOLIS, MINN.

Incorporated as city: 1867.
 Mayor: Eric G. Hoyer (July, 1951).
 1940 population & (rank): 492,370 (16).
 1950 prelim. population & (rank): 517,277 (17).
 1940-50 population change: +5.1%.
 1940 area: Land, 53.8 sq. mi.; inland water, 5.0.
 Altitude: Highest, 945 ft.; lowest, 695.
 Location: In SE central part of state, on Mississippi River.
 County: Seat of Hennepin Co.
 Churches: 454.
 City-owned parks: 143.
 Telephones: 275,242.
 Radio sets: 400,000.
 Television sets: 80,000.
 Radio stations: AM, 6; FM, 2.
 Television stations: 2.
 Assessed valuation (1951): \$308,000,000.
 City tax rate (1951): \$1.41 per \$100.
 Bonded debt (1951): \$51,000,000.
 Revenue (1951): \$48,000,000.
 Expenditure (1951): \$52,000,000.

Lieutenant Zebulon Pike made a treaty with the Sioux Indians in 1805-06 by which they ceded to the whites land including the Falls of St. Anthony and the site of Minneapolis. Fort Snelling was built in 1819-20, and in 1823 the government built a lumber and flour mill. Today Minneapolis is one of the outstanding flour-milling centers. Serving a vast agricultural region, the city is the largest distributing center for tractors and farm implements.

Not far from the city on the Mississippi River is U. S. Lock and Dam No. 1, a few miles above which is the head of navigation. From there to St. Louis, a river stretch of 659 miles, 26 dams insure a 9-foot channel for navigation. Minnehaha Park along the Mississippi contains Minnehaha Falls, made famous by Longfellow's poem, *The Song of Hiawatha*. Above the falls is a statue of Hiawatha and Minnehaha.

Minneapolis has 22 lakes within its park system, offering fishing, bathing and sail-boating in the summer, iceboating and skating in the winter. Twelve miles west of the city is Lake Minnetonka, which has 110 miles of shore line.

Across the Mississippi is Minneapolis' "twin city," St. Paul.

NEWARK, N. J.

Incorporated as city: 1836.
 Mayor: Ralph A. Villani (May, 1953).
 1940 population & (rank): 429,760 (18).
 1950 prelim. population & (rank): 437,857 (21).
 1940-50 population change: +1.9%.
 1940 area: Land, 23.6 sq. mi.; inland water, 3.2.
 Altitude: Highest, 225 ft.; lowest, sea level.
 Location: In NE part of state, on Passaic River and Newark Bay.
 County: Seat of Essex Co.
 Churches: Protestant, 159; Roman Catholic, 41; Jewish, 32; others, 57.
 City-owned parks: 40 (34.24 ac.).
 County-governed parks in city: 7 (749.35 ac.).
 Telephones: 155,842.
 Radio stations: AM, 4; FM, 3.
 Television stations: 1.

Assessed valuation (1950): \$718,189,494.
 City tax rate (1950): \$6.84 per \$100.
 Net bonded debt (1950): \$45,280,659.79.
 Revenue (1949): \$56,765,285.44.
 Expenditure (1949): \$55,204,251.78.

NEW ORLEANS, LA.

Incorporated as city: 1805.
 Mayor: De Lesseps S. Morrison (May, 1954).
 1940 population & (rank): 494,537 (15).
 1950 prelim. population & (rank): 567,257 (16).
 1940-50 population change: +14.7%.
 1940 area: Land, 199.4 sq. mi.; inland water, 164.1.
 Altitude: Highest, 15 ft.; lowest, 4 below sea level.
 Location: In SE part of state, between Mississippi River and Lake Pontchartrain.
 Parish: Seat of Orleans Parish.
 Churches: Over 600.
 City-owned parks: 69 (1,700 ac.).
 Telephones: 210,412.
 Radio sets: 192,600.
 Television sets: 34,895.
 Radio stations: AM, 8; FM, 5.
 Television stations: 1.
 Assessed valuation (1950): \$602,309,259.
 City tax rate (1950): \$3.15 per \$100.
 Bonded debt (1950): \$47,812,000.
 Revenue (1950, budget): \$16,800,000.
 Expenditure (1950, budget): \$16,800,000.

One of the few cities of the nation that have been under three flags, New Orleans has belonged to Spain, France and the U. S. The French founded it in 1718 and named it in honor of the Duke of Orleans.

In 1762, France ceded the city and the territory to Spain. In 1800, the territory was returned to France, but government authorities did not take over until 1803, only 20 days before the region became part of the U. S. in the Louisiana Purchase.

As a memento of the old days, New Orleans has a French Quarter, or Vieux Carré, which has fascination for tourists and for gourmets. The narrow streets are overhung with the iron-trellised balconies of quaint old dwellings and shops. The restaurants are celebrated for their good food and unusual dishes.

Six miles below the city is Chalmette National Historical Park, which marks the battlefield on which Andrew Jackson defended New Orleans against the British in 1815. The British suffered 1,971 casualties, while the Americans suffered only 13. It was the last battle fought between the U. S. and Great Britain, the peace treaty having been signed at Ghent 15 days before the battle. The news had not yet reached New Orleans.

One of the city's historic buildings is the Cabildo, dating back to 1795, which was the headquarters of the Spanish governor. It later was the scene of the transfer of Louisiana from France to the U. S. Now it is a museum with historical and art displays.

The most spectacular and gayest festival in the U. S. is held in New Orleans—the Mardi Gras, which involves a week of carnival and reaches its climax on Shrove Tues-

day, the day before the beginning of Lent. On the more serious side, the city is one of the great ports of the U. S., with 23 miles of developed water frontage. It is the natural gateway for trade to Latin America.

NEW YORK, N. Y.

Chartered as "Greater New York": 1898.
 Mayor: Vincent R. Impellitteri (Jan., 1954).
 Borough Presidents: Bronx, James J. Lyons;
 Brooklyn, John Cashmore; Manhattan,
 Hugo E. Rogers; Queens, James A. Burke;
 Richmond, Cornelius A. Hall.
 1940 population & (rank): 7,454,995 (1).
 1950 prelim. population & (rank): 7,835,099 (1).
 1940-50 population change: +5.1%.
 1940 area: Land, 299.0 sq. mi.; inland water,
 66.4 sq. mi.
 Altitude: Highest, 430 ft.; lowest, sea level.
 Counties: Consists of 5 counties: Bronx, Kings
 (Brooklyn), New York (Manhattan),
 Queens, Richmond (Staten Island).
 Location: SE part of state, at mouth of Hud-
 son River.
 Churches: Protestant, 1,418; Jewish, 1,330;
 Roman Catholic, 525.
 City-owned parks: 882 (26,522 ac.).
 Telephones: 2,365,000.
 Families with radios: 2,258,470.
 Television sets: 1,475,000.
 Radio stations: AM, 25; FM, 23.
 Television stations: 6.
 Assessed valuation (1950): \$18,112,231,179.
 City tax rate: (1950): \$2.89 per \$100.
 Bonded debt (1949): \$2,956,918,918.59.
 Revenue (1949): \$1,076,312,809.81.
 Expenditure (1949): \$1,126,314,407.84.

In 1609, Henry Hudson, who worked for the Dutch East India Company, sailed up the river that now bears his name and went as far as Albany. Five years later, a permanent settlement was established at what is now New York, but it was originally called New Amsterdam by the Dutch governors. One of them, Peter Minuit, was said to have bought Manhattan Island from the Indians for \$24 worth of beads, buttons and trinkets. In 1664, Great Britain's Duke of York sent a fleet which quietly seized the settlement from the Dutch, without bloodshed, and rechristened the colony in honor of the Duke.

Control of New York passed to the young U. S. at the end of the Revolutionary War, and George Washington was inaugurated President in New York's old City Hall. Congress met in New York from 1785 to 1790.

Today New York is the most populous and wealthy city in the U. S. Much of this growth and prosperity is due to New York Harbor, which is one of the finest, and perhaps the busiest, in the world. The port clears more than 5,000 vessels a year and ships almost half of the entire trade of the U. S. For the visitor, perhaps the best view of New York Harbor is from the top of the Statue of Liberty, which is reached by ferry boats running hourly from the Battery, the southern tip of Manhattan. The statue, presented to the U. S. by France in 1885, is the tallest of modern times—152 feet high on a pedestal 151 feet high. An elevator runs to the balcony level, and a spiral stairway

leads to the observation platform. Another way to see the harbor and New York's skyline is to take the 40-mile boat trip around Manhattan. Boats leave from the Battery every day at 10:30 a.m. and 2:30 p.m.

In lower Manhattan, not far from the Battery, is Wall Street, the financial center of the nation. It was so named from the wall constructed nearly 300 years ago by the Dutch burghers to protect themselves against Indian raids. The New York Stock Exchange admits visitors. By way of contrast, New York's Chinatown, within walking distance of Wall Street to the north, has intriguing things to buy and restaurants with delicious things to eat.

Midtown Manhattan has Broadway, otherwise known as the "Main Stem," or "The Great White Way." More stage plays and motion-picture theaters are crowded in that area than in any comparable area in the world. Also night clubs.

Among the most noteworthy buildings, or clusters of buildings, in Midtown Manhattan are:

(1) The Empire State Building, the world's tallest structure, 1,250 feet high. Some half million tourists visit the building every year and shoot up in elevators to the observation tower on the 102d floor.

(2) Rockefeller Center—also known as Radio City. It occupies 12 acres and includes 15 buildings. The studios of the National Broadcasting Company can be inspected in tours that start every twenty minutes.

(3) United Nations Headquarters, which is in the process of construction on the East River at 42d Street. Here majestic buildings of glass, marble and stainless steel are going up.

The many museums of New York City are listed in a separate section (See Museums in the index). The most celebrated is the Metropolitan Museum of Art, one of the world's most famous. On the outskirts of New York City are two of the largest airfields in the world: La Guardia Field and Idlewild. La Guardia Field covers an area of 558 acres, and has observation decks from which one can watch the arrival and departure of domestic and overseas planes, 24 hours a day.

[For map of Manhattan, see p. 54.]

OKLAHOMA CITY, OKLA.

Incorporated as city: 1890.
 Mayor: Allen Street (Apr., 1951).
 City Manager: Ross Taylor.
 1940 population & (rank): 204,424 (42).
 1950 prelim. population & (rank): 242,450 (45).
 1940-50 population change: +18.6%.
 1940 area: Land, 49.8 sq. mi.; inland water, 0.
 Altitude: Highest, 1,100 ft.; lowest, 1,070.
 Location: In central part of state, on North
 Canadian River.
 County: Seat of Oklahoma Co.
 Churches: Protestant, about 280; Roman
 Catholic, 13; Jewish, 2; others, 5.
 City-owned parks: 63 (3,005.74 ac.).
 Telephones: 116,270.
 Radio stations: AM, 8; FM, 1.

Television stations: 1.
Assessed valuation (1950): \$172,408,366.
City Tax rate (1950): \$12.782 per \$1,000.
Bonded debt (1950): \$18,918,000.
Revenue (1950): \$8,784,230.64.
Expenditure (1950): \$7,935,758.79.

More than two thousand oil wells are located within the limits of Oklahoma City or close by, some of them more than a mile deep. The quest for oil knew no forbidden territory: there are derricks in residential districts and even on the grounds of the state capitol.

Oklahoma City sprang into being almost overnight. In 1889, the government threw open this territory for settlement, and there was a classic rush across the line to stake claims. Within a short time, Oklahoma City was a bustling town of 10,000.

The city now ranks as one of the dozen primary livestock markets in the country. Packing plants and flour mills are among the 600 manufacturing concerns. The city is also an important aviation center, with Tinker Field as an Air Force materiel depot. There are six privately owned airports in the area surrounding Oklahoma City.

OMAHA, NEBR.

Incorporated as city: 1857.
Mayor: Glenn Cunningham (May, 1951).
1940 population & (rank): 223,844 (39).
1950 prelim. population & (rank): 247,408 (41).
1940-50 population change: +10.5%.
1940 area: Land, 38.9 sq. mi.; inland water, 0.4.
Altitude: Highest, 1,245 ft.; lowest, 970.
Location: On Missouri River near its junction with Platte River.
County: Seat of Douglas Co.
Churches: Protestant, 179; Roman Catholic, 37; Jewish, 7; Orthodox, 3; others, 27.
City-owned parks: 50 (3,400 ac.).
Telephones: 110,000.
Radio sets: 79,200.
Television sets: 19,600.
Radio stations: AM, 5; FM, 1 (transit radio).
Television stations: 2.
Assessed valuation (1950): \$348,000,000.
City tax rate (1951): \$12.85 per \$1,000 (without school district).
Bonded debt (1950): \$11,663,500.
Revenue (1949): \$12,514,000.
Expenditure (1949): \$12,514,000.

PHILADELPHIA

First charter as city: 1701.
Mayor: Bernard Samuel (Jan., 1952).
1940 population & (rank): 1,931,334 (3).
1950 prelim. population & (rank): 2,064,794 (3).
1940-50 population change: +6.9%.
1940 area: Land, 127.2 sq. mi.; inland water, 7.8.
Altitude: Highest, 440 ft.; lowest, sea level.
Location: In SE part of state, at junction of Schuylkill and Delaware Rivers.
County: Seat of Philadelphia Co.
City-owned parks: 94 (7,754.54 ac.).
Radio stations: AM, 10; FM, 8.
Television stations: 3.
Assessed valuation (1950): \$3,529,338,287.
City tax rate (1950): \$2.975 per \$100.
Net bonded debt (1949): \$387,984,755.

Revenue (1949): \$115,695,650.
Expenditure (1949): \$119,820,819.

PITTSBURGH, PA.

Incorporated as city: 1816.
Mayor: David L. Lawrence (Jan., 1954).
1940 population & (rank): 671,659 (10).
1950 prelim. population & (rank): 673,763 (12).
1940-50 population change: +0.3%.
1940 area: Land, 52.1 sq. mi.; inland water, 3.0.
Altitude: Highest, 1,240 ft.; lowest, 715.
Location: In SW part of state, at junction of Allegheny and Monongahela Rivers to form Ohio River.
County: Seat of Allegheny Co.
Churches: Protestant, 778; Roman Catholic, 204; Jewish, 8.
City-owned parks: 19 (2,127 ac.).
Telephones: 289,510.
Radio sets: 675,000.
Television sets: 135,000.
Radio stations: AM, 7; FM, 7.
Television stations: 1.
Assessed valuation (1949): Land, \$412,663,176; buildings, \$577,131,134.
City tax rate (1949): Land, \$14 per \$1,000; buildings, \$28 per \$1,000.
Bonded debt (1949): \$47,225,400.
Revenue (1949): \$31,925,929.
Expenditure (1949): \$32,866,818.

No other city in the world produces so much iron and steel as does Pittsburgh. The territory within 30 miles of the courthouse produces one-fifth of the nation's pig iron, one-fourth of its steel and one-fifth of its glass. No other city in the world produces so much aluminum. As though this were not enough, Pittsburgh has the largest cork-manufacturing plant and the largest pickling and preserving business in the world.

A detachment of troops from Virginia put a fort on the site of present Pittsburgh in 1754, considering it a strategic spot. Following the original Virginia settlers, the French seized the spot; and in 1758, the British took it away from the French. The British built a new fort and named it after William Pitt, Prime Minister of England.

Pittsburgh's largest park is Schenley Park, of 422 acres, which is the home of the Carnegie Institute. The Department of Fine Arts of the Carnegie Institute holds a yearly international exhibition of paintings, which is one of the most widely known in the U. S. The Carnegie Museum contains some five million objects pertaining to natural sciences, ethnology and the useful arts.

PORTLAND, OREG.

Incorporated as city: 1851.
Mayor: Dorothy McCullough Lee (Jan., 1953).
1940 population & (rank): 305,394 (27).
1950 prelim. population & (rank): 371,011 (29).
1940-50 population change: +21.5%.
1940 area: Land, 63.5 sq. mi.; inland water, 3.4.
Altitude: Highest, 1,050 ft.; lowest, sea level.
Location: In NW part of state, on Willamette River.
County: Seat of Multnomah Co.
Churches: Protestant, 400; Roman Catholic, 37; Jewish, 10; Buddhist, 2.

City-owned parks: 99 (4,892 ac.).
 Telephones: 195,340.
 Radio stations: AM, 8; FM, 5.
 Television stations: None.
 Assessed valuation (1949-50): \$508,769,070.
 City tax rate (1949-50): \$18.10 per \$1,000.
 Bonded debt (June 30, 1950): \$23,354,797.20.
 Revenue (1950): \$24,428,529.54.
 Expenditure (1950): \$22,385,585.62.

Portland has a background of snow-capped mountains to the north and east. Mount Hood rises 11,245 feet above sea level, and is visible for great distances throughout Oregon. Because of the Japan Current, however, Portland itself has a mild climate.

So equable is the city's weather that climbing roses run rampant over fences and houses and sometimes even telephone poles. Portland holds a famous Rose Festival each year in June. Reflecting the diverse interests of the region, there takes place in October the Pacific International Livestock Exposition, including a horse show and rodeo.

Lewis and Clark sailed past the site of Portland in 1805, on an expedition across the continent for which Congress had appropriated \$2,500. They had started up the Missouri in the spring of 1804, and they reached the mouth of the Columbia River in canoes on Nov. 11, 1805. They built a fort near the present site of Astoria. From there up to Portland, the Columbia is wide and placid. At Portland the Willamette flows into the Columbia, which from that point east begins to flow through higher and higher bluffs up to the famous Columbia River Gorge. A dozen beautiful waterfalls drop hundreds of feet over the solid rock walls on the Oregon side of the gorge.

The great new aluminum plants and shipyards in the Portland area are among a large group of major industries founded in the Northwest following the completion of the great Bonneville Dam on the Columbia River.

PROVIDENCE, R. I.

Incorporated as city: 1831.
 Mayor: Walter H. Reynolds (Jan., 1953).
 1940 population & (rank): 253,504 (37).
 1950 prelim. population & (rank): 247,700 (40).
 1940-50 population change: -2.3%.
 1940 area: Land, 17.9 sq. mi.; inland water, 2.0.
 Altitude: Highest, 250 ft.; lowest, sea level.
 Location: In northern part of state, at head of Providence River (north arm of Narragansett Bay).
 County: Seat of Providence Co.
 Churches: Protestant, 94; Roman Catholic, 29.
 City-owned parks: 10 (892 ac.).
 Radio stations: AM, 7; FM, 6.
 Television stations: 1.
 City tax rate (1950): \$28 per \$1,000.
 Bonded debt (1950 est.): \$3,545,518.30.
 Revenue (1951, budget): \$28,893,304.48.
 Expenditure (1951, budget): \$26,870,862.50.

Roger Williams was a religious rebel, and he was banished from Massachusetts. In 1636 he founded Providence, which he so named in gratitude "for God's merciful providence in my distress." Two years later

he organized the First Baptist Church "for the worship of God and to hold college commencements in." Brown University to this day holds its commencements in this church.

Roger Williams still is remembered in Providence by a monument overstanding his grave, and by 455-acre Roger Williams Park, nearly one-third of which is a chain of lakes.

Since his time, Providence has become the second largest city in New England. Its early rise was due to its shipping trade, which included slaves, rum and molasses from the West Indies. Today it distributes oil, coal and lumber. Apart from sea trade, Providence has a thriving textile industry manufacturing woollens, worsteds and cottons. The city also is a leading center of jewelry manufacture.

RICHMOND, VA.

Incorporated as city: 1782.
 Mayor: T. Nelson Parker (July, 1952).
 City Manager: Sherwood Reeder (apptd. 1948).
 1940 population & (rank): 193,042 (45).
 1950 prelim. population & (rank): 229,906 (46).
 1940-50 population change: +19.1%.
 1940 area: Land, 21.4 sq. mi.; inland water, 1.6.
 Altitude: Highest, 240 ft.; lowest, 10.
 Location: In east central part of state, on James River.
 County: Seat of Henrico Co., but administratively independent.
 Churches: Protestant, 201; Roman Catholic, 13; Jewish, 5; others, 73.
 City-owned parks*: 53 (1,100.29 ac.).
 Radio stations: AM, 5; FM, 4.
 Television stations: 1.
 Assessed valuation (1940-50): \$481,412,077.
 City tax rate (1949-50): Real and personal property, \$2.20 per \$100; machinery, \$1 per \$100.
 Bonded debt (June 30, 1950): \$32,205,359.60.
 Revenue (1950): \$19,779,768.10.
 Expenditure (1950): \$19,145,619.91.

* Including 35 playgrounds.

Captain John Smith bought from the Indian chief Powhatan a tract of land near the present site of Richmond in 1609 and founded a settlement called Nonesuch. Richmond was laid out in 1737 by Col. William Byrd, and in 1779 it became the capital.

Today Richmond is one of the leading tobacco markets of the country. It has factories producing not only cigars and cigarettes but also chewing tobacco and snuff. Tobacco is its main industry.

Richmond had two periods of especial historical renown. One was in 1775 when the Virginia Convention met in St. John's Church to discuss the Revolution. George Washington and Thomas Jefferson attended. Patrick Henry made his famous speech in which he said: "I know not what course others may take; but as for me, give me liberty or give me death."

Again, during the Civil War, Richmond came into the historical spotlight. The city was the capital of the Confederacy. One after another, the Northern generals—Mc-

Clellan, Burnside, Hooker and Meade—failed to take Richmond. Grant finally succeeded, although not by storming the city itself. His siege of Petersburg ended in the downfall of the Confederacy. When Richmond was evacuated, General Lee ordered the main warehouse to be burned, and most of the city was wiped out by the spreading flames.

Among the historical buildings which remain in Richmond are the Capitol, which was designed by Thomas Jefferson after the Maison Carée, an ancient Roman temple at Nîmes, France. In the rotunda is the famous statue of George Washington made from lime in 1785 by Jean Antoine Houdon. The home of Robert E. Lee is now the headquarters of the Virginia Historical Society. Another famous citizen of Richmond was the pioneer Chief Justice of the U. S., John Marshall; the home he built about 1790, a quaint red-brick building, contains original furnishings, family portraits and costumes.

ROCHESTER, N. Y.

Incorporated as city: 1834.
Mayor: Samuel B. Dicker (Dec., 1952).
City Manager: Louis B. Cartwright (apptd. 1940).
1940 population & (rank): 324,975 (23).
1950 prelim. population & (rank): 331,252 (31).
1940-50 population change: +1.9%.
1940 area: Land, 34.8 sq. mi.; Inland water, 0.5.
Altitude: Highest, 655 ft.; lowest, 246 ft.
Location: In west part of state, on Genesee River.
County: Seat of Monroe Co.
Churches: Protestant, 128; Roman Catholic, 38; Jewish, 19; others, 22.
City-owned parks: 23 (1,880 ac.).
Telephones: 128,936.
Radio sets: 98,000.
Television sets: 42,000.
Radio stations: AM, 6; FM, 2.
Television stations: 1.
Assessed valuation (1950): \$577,408,847.
City tax rate (1950): \$30.08 per \$1,000.
Bonded debt (Dec. 31, 1949): \$22,931,000.
Revenue (1949): \$33,801,953.39.
Expenditure (1949): 32,822,760.94.

Rochester is the mecca of camera enthusiasts. Here is the home of the Eastman Kodak Company, and here is manufactured 90 per cent of the nation's motion-picture film. Tours of the Kodak plants are conducted daily. And at the George Eastman House is a photographic museum in which are exhibitions and demonstrations of picture processes of interest to both amateur and professional photographers.

Rochester also is one of the world's leading centers for the manufacture of optical goods and surgical instruments. The Bausch and Lomb Optical Company and the Taylor Instrument Company are here.

In addition to its factories, Rochester prides itself on its flowers. In the botanical gardens of Highland Park is a world-famous collection of lilacs—403 varieties. When they bloom about the end of May, a Lilac Week celebration is held.

ST. LOUIS, MO.

Incorporated as city: 1822.
Mayor: Joseph M. Darst (Apr., 1952).
1940 population & (rank): 816,048 (8).
1950 prelim. population & (rank): 852,623 (8).
1940-50 population change: +4.5%.
1940 area: Land, 61.0 sq. mi.; inland water, 4.0.
Altitude: Highest, 584 ft.; lowest, 394 ft.
Location: On Mississippi River, near its con-junction with Missouri River.
County: In St. Louis Co., but independent city.
Churches: Protestant, 578; Roman Catholic, 86; Jewish, 25; others, 95.
City-owned parks: 71 (3,334 ac.).
Telephones: 499,377 (metropolitan area).
Radio sets: 450,000.
Television sets: 170,000.
Radio stations: AM, 10; FM, 4.
Television stations: 1.
Assessed valuation (1950): \$1,248,000,000.
City tax rate (1950): \$2.74 per \$100.
Bonded debt (1950): \$32,865,000.
Revenue (1950): \$51,564,725.55.
Expenditure (1950): \$48,168,927.33.

St. Louis is one of the major industrial centers of the nation. Among its other noteworthy features is that it is the leading beer-producing center of the country. The Anheuser-Busch brewery, largest in the world, is open to visitors. St. Louis also is important in the production of stoves, sugar-mill machinery and steel cars.

The city is one of the oldest settlements in the Mississippi Valley, having been founded in 1764 as a trading post and named after Louis IX of France. It was at St. Louis that "Upper Louisiana" was transferred by France to the U. S. in 1804.

South of St. Louis lie the Ozark Mountains, one of the outstanding playgrounds of the mid-continent. The Ozarks country is a region of rugged, wooded hills, deep valleys and swift streams, many of which provide excellent fishing. The Ozark ridges extend into Arkansas and Oklahoma.

SALT LAKE CITY, UTAH

Incorporated as city: 1851.
Mayor: Earl J. Glade (Jan., 1952).
1940 population & (rank): 149,934 (57).
1950 prelim. population & (rank): 181,718 (51).
1940-50 population change: +21.2%.
1940 area: Land, 52.5 sq. mi.; inland water, 0.
Altitude: 4,255 ft.
Location: In northern part of state, on Jordan River, near Great Salt Lake.
County: Seat of Salt Lake Co.
Churches: Mormon, 135; Roman Catholic, 8; Jewish, 4; others, 38.
City-owned parks: 20 (1,134 ac.).
Telephones: 86,500
Radio sets: 53,000.
Television sets: 20,000.
Radio stations: AM, 5; FM, 3.
Television stations: 2.
Assessed valuation (1949): \$187,897,877.
City tax rate (1949): \$18.75 per \$1,000.
Bonded debt (1949): \$3,397,000.
Revenue (1949): \$8,967,593.30.
Expenditure (1949): \$8,772,556.21.

U OF T
LIBRARY

The Mormons, headed by Brigham Young, founded Salt Lake City in July, 1847, feeling that the soil was good, although dry. They dammed a creek across the site of the present city, and thereby introduced one of the first irrigation projects in America. Other Mormon bands came in, and by 1852 the colony numbered some 15,000.

Troops had to be kept in Salt Lake City for several years because of disagreements between non-Mormons and Mormons. The practice of polygamy was renounced by the Mormon Church in 1890, and Utah received statehood six years later.

Some of Salt Lake City's most interesting edifices are those occupied or inspired by Brigham Young and his family. The Mormon Temple was 40 years in the building (1853-1893), and none but Mormons are permitted to enter. The Mormon Tabernacle, with its great domed roof, seats 8,000 people. The acoustical properties of the building are reputed to be so remarkable that a pin dropped at the organ may be heard from the farthest seat. The organ contains more than 10,500 pipes, and its programs have been heard over nation-wide radio networks. The public is admitted at specified hours.

Sixteen miles from Salt Lake City is Great Salt Lake, an inland sea in which it is difficult for a swimmer to sink because of the high salt content.

SAN FRANCISCO, CALIF.

Incorporated as city: 1850.

Mayor: Elmer E. Robinson (Jan., 1952).

1940 population & (rank): 634,536 (12).

1950 prelim. population & (rank): 760,753 (11).

1940-50 population change: +19.9%.

1940 area: Land, 44.6 sq. mi.; inland water, 48.5.

Altitude: Highest, 900 ft.; lowest, sea level.

Location: Between Pacific Ocean and San Francisco Bay.

County: Coextensive with San Francisco Co. Churches: 353.

City-owned parks: 50 (3,206 ac.).

Telephones: 417,133.

Radio sets: 273,620.

Television sets: 99,000 (est.).

Radio stations: AM, 7; FM, 7.

Television stations: 3.

Assessed valuation (1949-50): \$1,508,959,293.

City tax rate (1949-50): \$5.66 per \$100.

Bonded debt (June 30, 1948): \$137,025,000.

Revenue (1948): \$65,049,000.

Expenditure (1948): \$63,399,000.

A narrow arm of land embraces San Francisco Bay, the largest land-locked harbor in the world, and shelters it from the Pacific Ocean. On this arm of land is San Francisco, a city perched on hills and almost surrounded by blue water.

In 1776, the Spaniards established a presidio, or military post, on the end of the fabulously beautiful peninsula. In the following year, a little town called Yerba Buena ("Good Herb," because mint grew in abundance) was founded—the origin of the present San Francisco.

When gold was discovered in California in 1848, the city quickly jumped to 10,000,

and it experienced turbulent years until order was established by Vigilance Committees, first in 1851 and again in 1856. Then followed a period of more orderly growth, and the foundations of the great commerce and industry of today were laid.

San Francisco is the outstanding seaport on the Pacific Coast. Its 43 piers and 17 miles of berthing space handle more than 30 million tons of freight a year. It was one of the great shipbuilding centers in World War I, at Mare Island, and again in World War II, in the Henry Kaiser mass-production yards. It remains one of the country's major naval-training centers.

Two of the world's most famous bridges are at San Francisco. One is the Golden Gate Bridge, spanning the strait which is the entrance to the bay. It is the largest single-span suspension bridge in the world, with an over-all length of 8,940 feet. The other bridge connects San Francisco with Oakland across the bay to the east. It is 8½ miles long, including approaches, and 4½ miles of it is over navigable water.

San Francisco has the only municipally owned opera house in America. It is one of the buildings in the Civic Center, which occupies more than three square blocks. In 1945, the Civic Center was the scene of the international conference that drew up the Charter for the U. N.

The largest Chinatown outside the Orient occupies twelve square blocks of San Francisco and has a population of 16,000. Delicious Chinese food is served in its restaurants, fine Chinese products are in its shops, and theatrical stars from Canton and Shanghai appear in its theaters. It has the only Chinese telephone exchange in the U. S.

SEATTLE, WASH.

Incorporated as city: 1869.

Mayor: William F. Devin (June, 1952).

1940 population & (rank): 368,302 (22).

1950 prelim. population & (rank): 462,440 (19).

1940-50 population change: +25.6%.

1940 area: Land, 68.5 sq. mi.; inland water, 12.2.

Altitude: Highest, 540 ft.; lowest, sea level.

Location: In west central part of state, on Puget Sound.

County: Seat of King Co.

Churches: Protestant, 250; Roman Catholic, 25; Jewish, 7.

City-owned parks: 52 (1,845,825 ac.).

Telephones: 261,639.

Radio sets: 161,200.

Television sets: 23,170.

Radio stations: AM, 9; FM, 3.

Television stations: 1.

Assessed valuation (1950): \$418,993,294.

City tax rate (1950): \$49.40 per \$1,000.

Bonded debt* (Dec. 31, 1949): \$22,943,000.

Revenue* (1949): \$20,879,819.42.

Expenditure* (1949): \$20,853,401.93.

*General; not including city-owned light, water, transit systems.

A city of steep hills, Seattle lies between two bodies of water—Puget Sound on the west and Lake Washington on the east. The

fine landlocked harbor has made Seattle one of the major ports of the U. S., with docks accommodating 120 seagoing vessels at one time. Shipping routes to the Orient and Alaska are the most important.

Washington leads the nation in sea foods, and Seattle reflects that supremacy by being the largest halibut port in the world. Of the entire season's catch of cod, more than half is salted and shipped to inland markets. Canned salmon also is a big item in Seattle's industry.

Huge log rafts of fir and red cedar move out of Seattle for the lumber markets. The city's home industries include shipyards and the Boeing airplane plant.

From the western side of Seattle, the Olympic Mountains are visible across Puget Sound. On the east are the Cascade Mountains. To the south is snow-capped Mt. Rainier. And to the north is Mt. Baker, five hours away by automobile.

SYRACUSE, N. Y.

Incorporated as city: 1848.

Mayor: Thomas J. Corcoran (Jan., 1954).

1940 population & (rank): 205,967 (41).

1950 prelim. population & (rank): 220,067 (47).

1940-50 population change: +6.8%.

1940 area: Land, 25.3 sq. mi.; inland water, 0.4.

Altitude: Highest, 840 ft.; lowest, 363.

Location: Central part of state, near Oneida Lake.

County: Seat of Onondaga Co.

Churches: Protestant, 86; Roman Catholic, 23; Jewish, 8; others, 8.

City-owned parks: 173 (2,158 ac.).

Telephones: 101,640.

Radio stations: AM, 5; FM, 2.

Television stations: 2.

Assessed valuation (1950): Real estate, \$341,-216,072; special franchise, \$15,604,487.

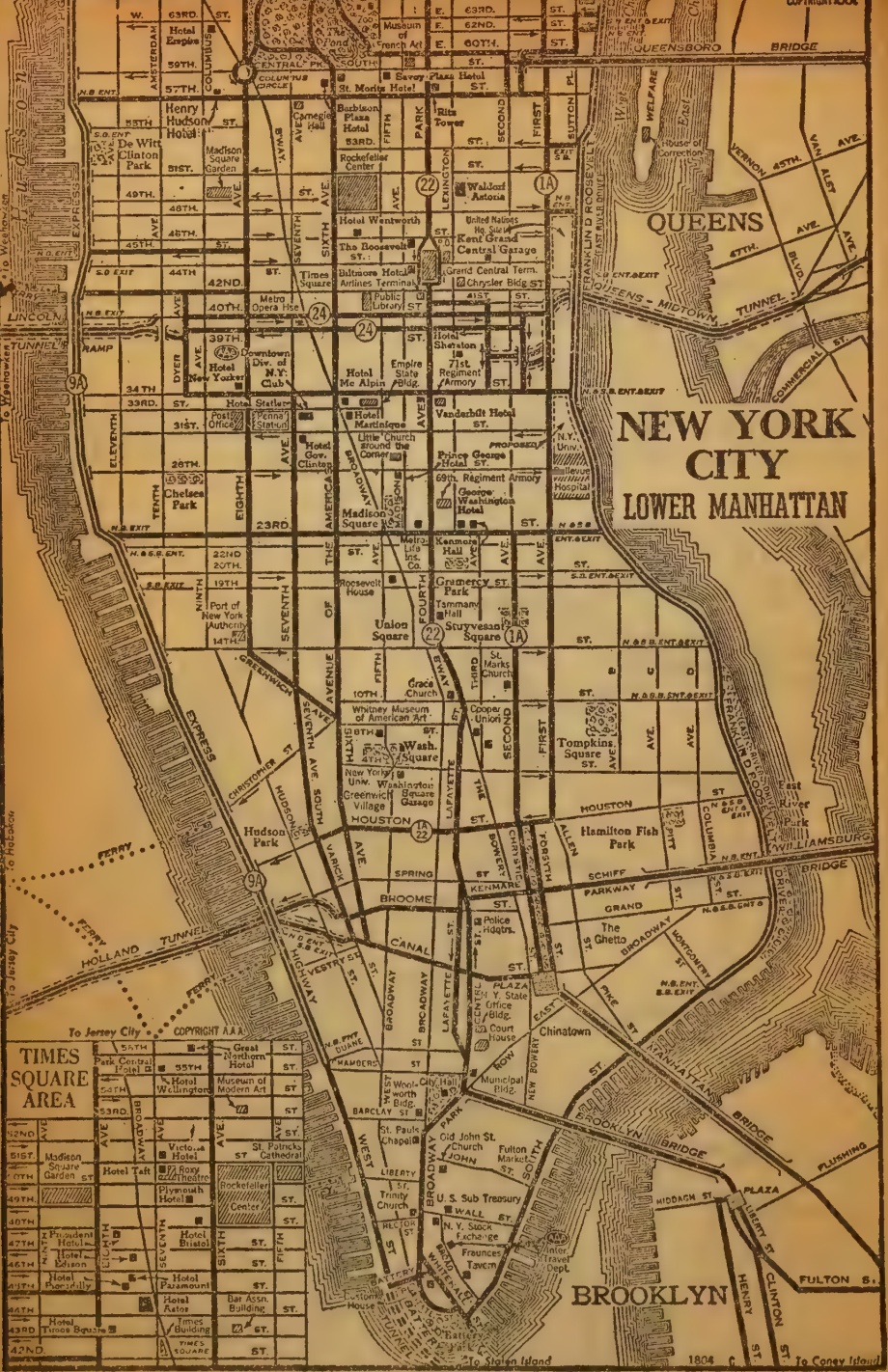
City tax rate (1950): \$27.959 per \$1,000.

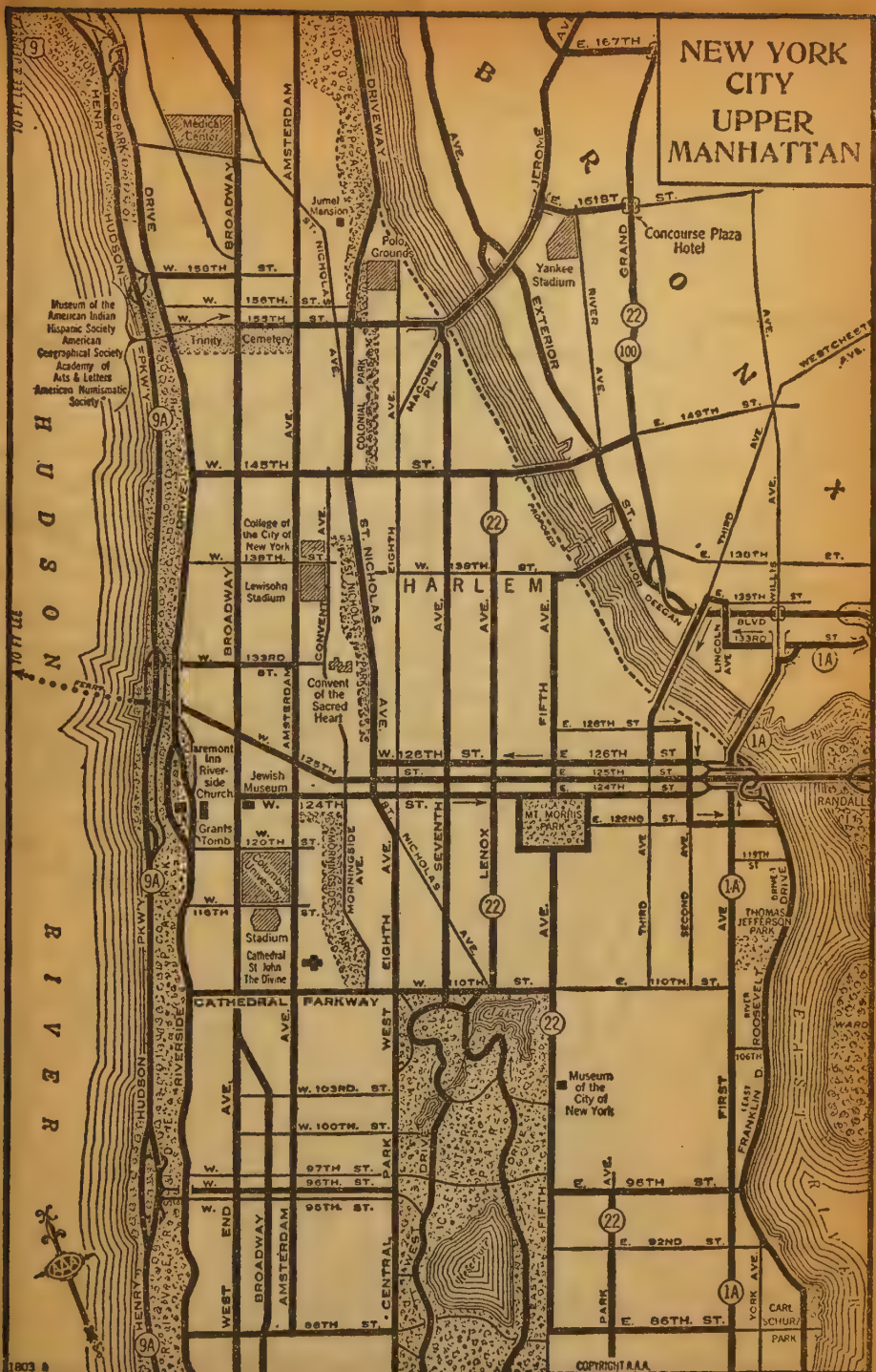
Bonded debt (Dec. 31, 1950): \$6,097,839.47.

WASHINGTON, D. C.,

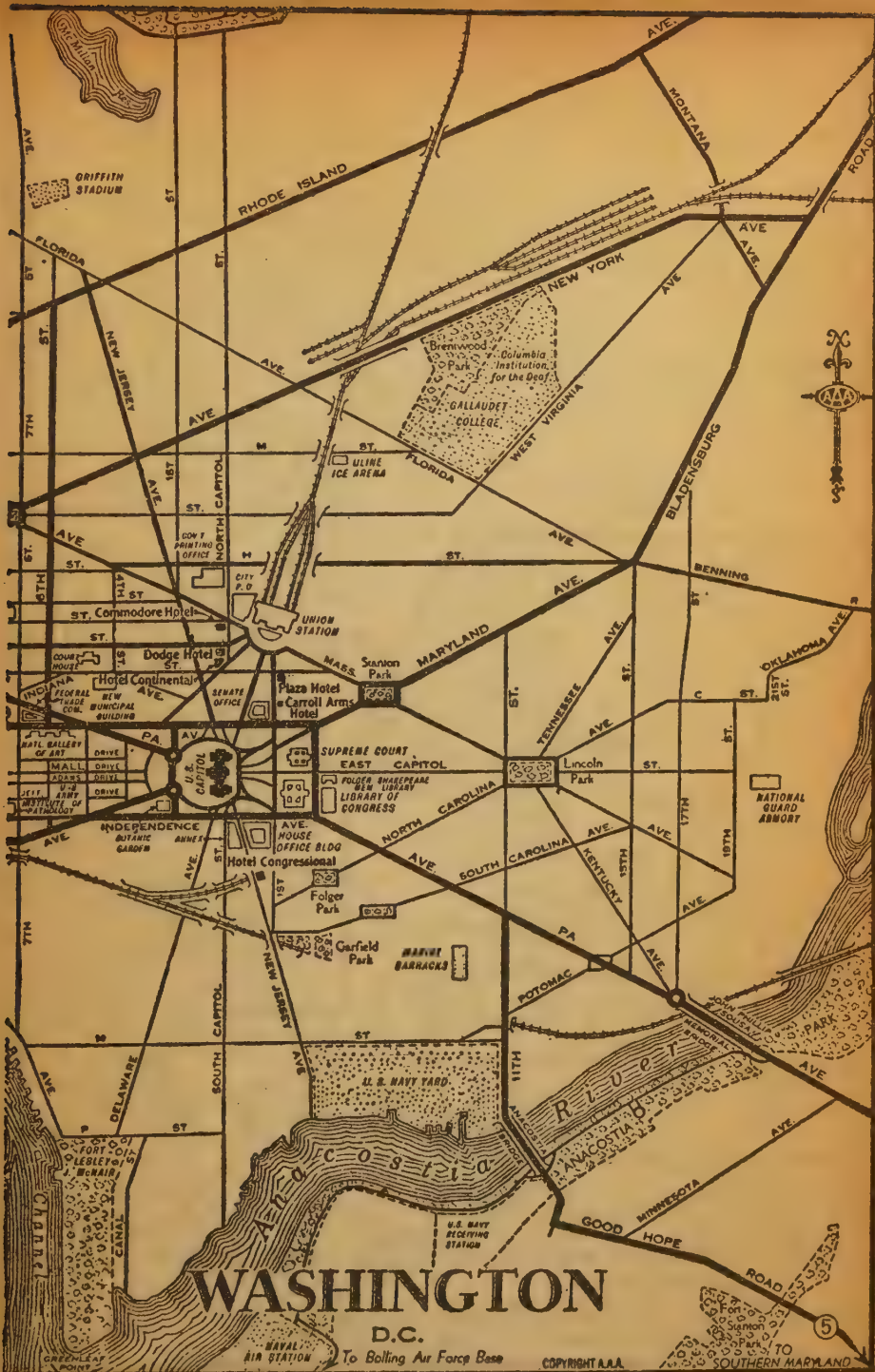
see p. 18 [For map, see p. 56.]











WASHINGTON

D.C.

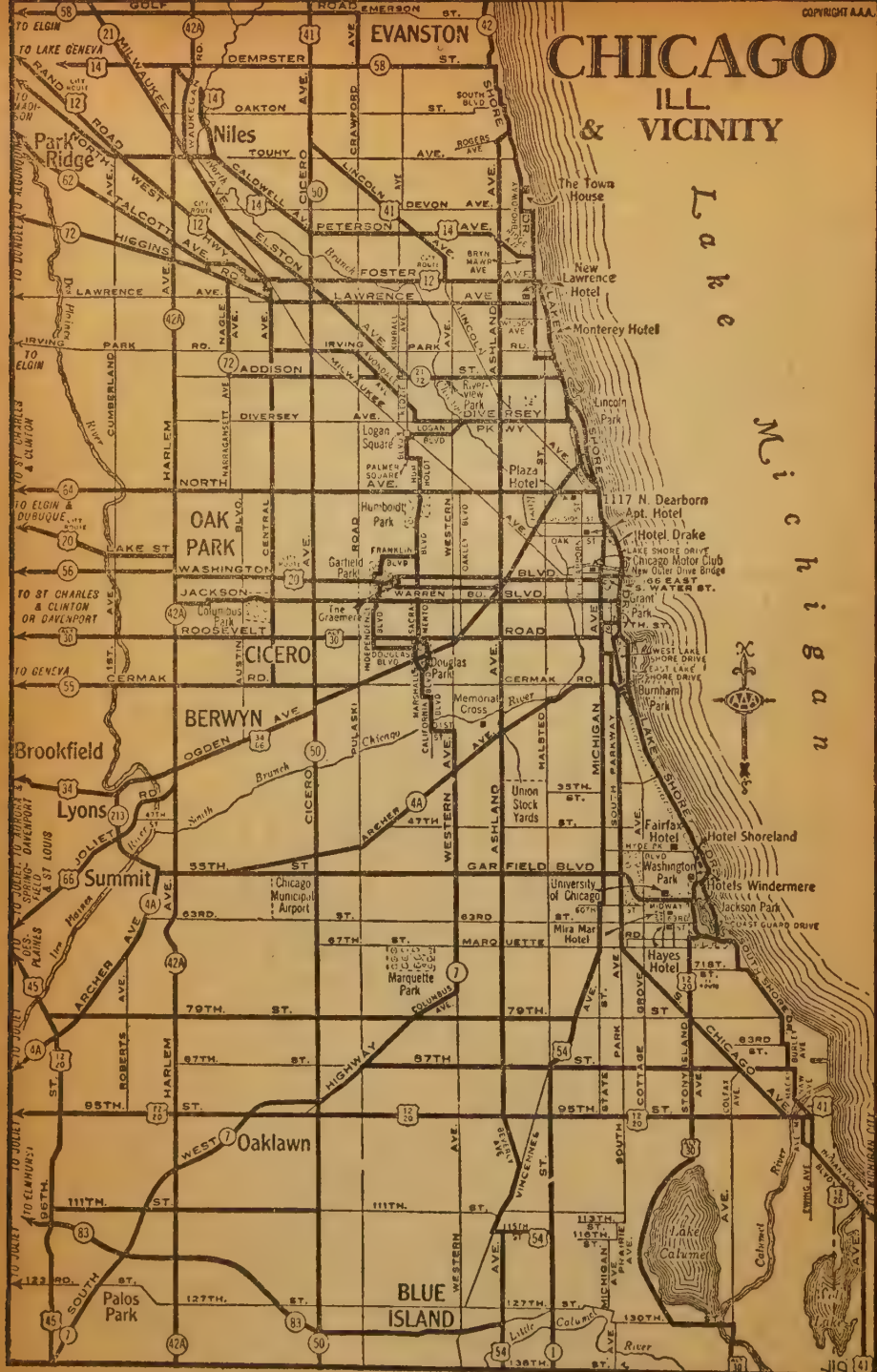
To Bolling Air Force Base

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CHICAGO ILL. & VICINITY





Tabulated Data on City Governments

Source: Questionnaires to the cities.

City	MAYOR		City manager's salary ^{1,2}	COUNCIL OR COMMISSION			
	Term, years	Salary ¹		Name	Members	Term, years	Salary ¹
Atlanta, Ga.....	4	\$13,500	.....	Council	13	4	\$ 150 ^a
Baltimore, Md.....	4	15,000	.....	Council	20	4	4,000
Birmingham, Ala.....	4	8,600	.....	Commission	2	4	7,600
Boston, Mass.....	2	20,000	.....	Council	22	2	3,000
Buffalo, N. Y.....	4	12,000	.....	Council	15	2 ^a	3,500
Chicago, Ill.....	4	18,000	.....	Council	50	4	5,000
Cincinnati, Ohio.....	2	6,200	\$25,000	Council	9	2	5,000
Cleveland, Ohio.....	2	15,000	.....	Council	33	2	4,000
Dallas, Tex.....	2	20 ^a	15,000	Council	9	2	20 ^a
Denver, Colo.....	4	6,000	.....	Council	9	4	1,200
Des Moines, Iowa.....	4	300	20,000	Council	5	4 ^a	300
Detroit, Mich.....	2	25,000	.....	Council	7	2	5,000
Hartford, Conn.....	2	None	18,000	Council	9	2	None
Houston, Tex.....	2	20,000	.....	Council	8	2	300 ⁷
Indianapolis, Ind.....	4	.....	.....	Council	9	4	1,200
Jersey City, N. J.....	4	8,000	.....	Commission	5	4	7,500
Los Angeles, Calif.....	4	18,000	.....	Council	15	2	7,200
Memphis, Tenn.....	4	12,500	.....	Commission	5	4	6,000
Miami, Fla.....	2	5,000	15,750	Council	5	4	5,000
Milwaukee, Wis.....	4	12,300	.....	Council	27	4	3,484
Minneapolis, Minn.....	2	9,000 ^a	.....	Council	26	4	4,200 ^a
New Orleans, La.....	4	12,000	.....	Commission	8	4	6,000
New York, N. Y.....	4	40,000	.....	Council	25	4	7,000
Newark, N. J.....	4	8,250	.....	Commission	5	4	7,500
Oklahoma City, Okla.....	4	1,000	15,000	Council	8	4	10 ^a
Omaha, Nebr.....	3	5,000	.....	Commission	6	3	4,500
Philadelphia, Pa.....	4	19,800	.....	Council	22	4	7,500
Pittsburgh, Pa.....	4	15,000	.....	Council	9	4	8,000
Portland, Oreg.....	4	6,000	.....	Commission	5	4	5,000
Providence, R. I.....	2	9,000	.....	Council	26	2	1,000
Richmond, Va.....	2	1,200	20,000	Council	9	2	1,200
Rochester, N. Y.....	2	2,250	10,000	Council	9	4	1,500
St. Louis, Mo.....	4	10,000	.....	Council	29	4	1,800
Salt Lake City, Utah.....	4	6,000	.....	Commission	5	4	5,000
San Francisco, Calif.....	4	20,000	.....	Council	11	4	2,400
Seattle, Wash.....	4	10,000	.....	Council	9	4	4,800
Spokane, Wash.....	.....	5,000	.....	Commission	5	4	5,000
Syracuse, N. Y.....	4	15,000	.....	Council	10	2	2,500
Tulsa, Okla.....	2	8,200	.....	Commission	4	2	6,000
Wichita, Kans.....	1	360	11,000	Council	5	4	360

¹ Annual, unless otherwise indicated. ² City Manager's term is indefinite and at will of Council. ³ Per month. ⁴ For District Councilmen; 4 years for Councilmen at-large. ⁵ Per Council meeting. ⁶ For 3 members; 2 years for 2 members. ⁷ Per month part-time. ⁸ Until July 1, 1951; then \$6,000. ⁹ Until July 1, 1951; then \$2,400.

Tabulated Data on State Governments

Source: Questionnaires to the states.

State	GOVERNOR		LEGISLATURE ¹					HIGHEST COURT ²		
	Term	Annual salary	Membership U ³ L ⁴	Term U ³ L ⁴	Salaries of members ⁵	Members	Term	Annual salary		
Alabama.....	4 ⁶	\$12,000	35 106	4 4	\$ 20 per diem	7	6	\$ 9,500		
Arizona.....	2	10,000	19 58	2 2	8 per diem	5	6	8,500		
Arkansas.....	2 ⁷	10,000	35 100	4 2	1,200 per biennium	7	8	9,000		
California.....	4	25,000	40 80	4 2	1,200 per annum	7	12	16,000		
Colorado.....	2	10,000	35 65	4 2	100 per month	7	10	6,500		
Connecticut.....	4	12,000	36 272	2 2	600 per term	5	8	15,000		
Delaware.....	4	7,500	17 35	4 2	1,077 per annum	6	12	15,000		
Florida.....	4 ⁶	12,000	38 95	4 2	10 per diem	7	6	10,000		
Georgia.....	4 ⁶	12,000	54 205	2 2	15 per diem	7	6	8,000		
Idaho.....	4 ⁶	7,500	44 59	2 2	10 per diem	4	6	7,500		
Illinois.....	4	12,000	51 153	4 2	3,000 per annum	7	9	15,000		
Indiana.....	4 ⁵	8,000	50 100	4 2	1,200 per annum	5	6	11,000		
Iowa.....	2	12,000	50 108	4 2	2,000 per session	9	6	7,500		
Kansas.....	2	10,000	40 125	4 2	5 per diem	7	2	10,000		
Kentucky.....	4 ⁶	10,000	38 100	4 2	25 per diem	7	8	9,000		
Louisiana.....	4 ⁶	12,000	39 100	4 4	20 per diem	7	14	14,000		
Maine.....	2	10,000	33 151	2 2	850 per session	6	7	10,000		
Maryland.....	4 ⁶	4,500	29 123	4 4	1,800 per annum	5	15	16,500		
Massachusetts.....	2	20,000	40 240	2 2	3,750 per annum	7	Life	17,000		
Michigan.....	2	22,500	32 100	2 2	2,400 per annum	8	8	15,000		
Minnesota.....	2	12,000	67 131	4 2	2,000 per session	7	6	11,000		
Mississippi.....	4 ⁶	10,000 ⁹	49 140	4 4	1,500 per session ¹⁰	6	8	10,000		
Missouri.....	4 ⁶	10,000	34 154	4 2	1,500 per annum	7	12	12,000		
Montana.....	4	7,500	56 90	4 2	10 per diem	5	6	9,000		
Nebraska.....	2	10,000	43 ¹¹	2 ¹¹	872 per annum	7	6	8,500		
Nevada.....	4	7,600	17 43	4 2	15 per diem	3	6	8,000 ¹²		
New Hampshire.....	2	10,000	24 (1 ³)	2 2	200 per biennium	5	(1 ⁴)	9,500		
New Jersey.....	4 ⁶	20,000	21 60	4 2	3,000 per annum	(1 ⁵)	7	20,000		
New Mexico.....	2 ⁸	10,000	24 49	4 2	10 per diem	5	8	8,000		
New York.....	4	25,000	56 150	2 2	5,000 per session	7	14	28,000		
North Carolina.....	4 ⁶	15,000	50 120	2 2	600 per term	7	8	14,400		
North Dakota.....	2	6,000	49 113	4 2	5 per diem	5	10	8,750		
Ohio.....	2	13,000	33 134	2 2	2,600 per annum	7	6	12,000		
Oklahoma.....	4 ⁶	15,000	44 (1 ⁶)	4 2	15 per diem ¹⁷	9	6	12,500		
Oregon.....	4 ³	10,000	30 60	4 2	8 per diem ¹⁸	7	6	9,500		
Pennsylvania.....	4 ⁶	25,000	50 208	4 2	3,000 per session	7	21	23,000		
Rhode Island.....	2	15,000	44 100	2 2	5 per diem ¹⁹	5	(2 ⁰)	13,000		
South Carolina.....	4 ⁶	9,750	46 124	4 2	1,000 per session	5	10	10,100		
South Dakota.....	2 ⁸	8,500	35 75	2 2	1,050 per biennium	5	6	7,200		
Tennessee.....	2 ²¹	12,000	33 99	2 2	4 per diem ²²	5	8	12,000		
Texas.....	2	12,000	31 150	4 2	10 per diem ²³	9	6	12,000		
Utah.....	4	7,500	23 60	4 2	300 per annum	5	10	7,200		
Vermont.....	2	8,500	30 245	2 2	750 per session	5	2	7,000		
Virginia.....	4 ⁶	15,000	40 100	4 2	720 per session ²⁴	7	12	10,000		
Washington.....	4	15,000	46 99	4 2	1,200 per annum	9	6	12,000		
West Virginia.....	4 ⁶	10,000	32 94	4 2	500 per annum	5	12	12,500		
Wisconsin.....	2	12,500	33 100	4 2	200 per month	7	10	12,000		
Wyoming.....	4	8,000	27 56	4 2	12 per diem	3	6	8,000		

¹ Known as **General Assembly** in Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia; **Legislative Assembly** in Montana, North Dakota, Oregon; **General Court** in Massachusetts, New Hampshire; **Legislature** in other states. Meets annually in California, Maryland, Massachusetts, New Jersey, New York, Rhode Island, South Carolina; biennially in other states. ² Known as **Court of Appeals** in Kentucky, Maryland, New York; **Supreme Court of Appeals** in Virginia, West Virginia; **Supreme Judicial Court** in Maine, Massachusetts; **Supreme Court of Errors** in Connecticut; **Superior Court** in New Jersey; **Supreme Court** in Nevada, New York, Wisconsin; **House of Delegates** in Maryland, Virginia, West Virginia; **House of Assembly** in New Jersey; **House of Representatives** in other states. ³ Does not include additional payment for expenses, mileage, etc. ⁴ Cannot succeed himself. ⁵ Constitutional amendment being voted on Nov. 7, 1950, for 4-year term and prohibition of second consecutive term. ⁶ May not serve a third consecutive term. ⁷ \$15,000 beginning 1952. ⁸ \$2,000 beginning 1952. ⁹ Unicameral legislature. ¹⁰ For 2 members; other receives \$7,500. ¹¹ Varies from 350 to 400. ¹² Until 70 years old. ¹³ Not less than 24 judges. ¹⁴ Varies from 118 to 120. ¹⁵ During session; \$100 per month when not in session. ¹⁶ For 50 days only. ¹⁷ For 60 days only. ¹⁸ Term of good behavior. ¹⁹ May not serve a fourth consecutive term. ²⁰ For 75 days only. ²¹ For first 120 days; \$5 per diem thereafter. ²² \$1,050 after Jan. 1952.

CONGRESS OF THE UNITED STATES

PARTY STRENGTH IN CONGRESS

The Senate (Necessary to majority—49)

	73rd 1933	74th 1935	75th 1937	76th 1939	77th 1941	78th 1943	79th 1945	80th 1947	81st 1949	82nd 1951
Democratic . . .	59	69	75	69	66	57	57	45	54	49
Republican . . .	36	25	17	23	28	38	38	51	42	47
Farmer-Labor . .	1	1	2	2	0	0	0	0	0	0
Progressive . . .	0	1	1	1	1	1	1	0	0	0
Independent . . .	0	0	1	1	1	0	0	0	0	0

The House (Necessary to majority—218)

	73rd 1933	74th 1935	75th 1937	76th 1939	77th 1941	78th 1943	79th 1945	80th 1947	81st 1949	82nd 1951
Democratic . . .	313	322	333	262	268	222	243	188	263	235
Republican . . .	117	103	89	170	162	209	190	246	171	199
Farmer-Labor . .	5	3	5	1	1	1	0	0	0	0
Progressive . . .	0	7	8	2	3	2	1	0	0	0
Independent . . .	0	0	0	0	1	0	0	0	0	1
American Labor .	0	0	0	0	0	1	1	1	1	0

NOTE: The year shown with each Congress is the one in which the first session was held. The party breakdown is according to the election held the preceding November.

THE EIGHTY-SECOND CONGRESS

THE SENATE

Democrats are in *italic* type; Republicans in roman. The expiration date of each senator's term is Jan. 3 of the year shown in parentheses. An asterisk (*) indicates that the senator was returned to office in the election of Nov. 7, 1950.

ALABAMA

John J. Sparkman (1955)
**Lister Hill* (1957)

ARIZONA

Ernest W. McFarland (1953)
**Carl Hayden* (1957)

ARKANSAS

John L. McClellan (1955)
**J. William Fulbright*
(1957)

CALIFORNIA

William F. Knowland
(1953)
Richard M. Nixon (1957)

COLORADO

Edwin C. Johnson (1955)
**Eugene D. Millikin* (1957)

CONNECTICUT

William Benton (1953)¹
**Brien McMahon* (1957)

DELAWARE

John J. Williams (1953)
J. Allen Frear, Jr. (1955)

FLORIDA

Spessard L. Holland
(1953)
George A. Smathers (1957)

GEORGIA

Richard B. Russell (1955)
**Walter F. George* (1957)

IDAHO

Henry C. Dworshak (1955)*
Herman Welker (1957)

ILLINOIS

Paul H. Douglas (1955)
Everett M. Dirksen (1957)

INDIANA

William E. Jenner (1953)
**Homer E. Capehart* (1957)

IOWA

Guy M. Gillette (1955)
**Bourke B. Hickenlooper*
(1957)

KANSAS

Andrew F. Schoeppel
(1955)
Frank Carlson (1957)

KENTUCKY

Virgil Chapman (1955)
Earle C. Clements (1957)

LOUISIANA

Allen J. Ellender (1955)
**Russell B. Long* (1957)

MAINE

Owen Brewster (1953)
Margaret Chase Smith
(1955)

MARYLAND

Herbert R. O'Connor (1953)
John M. Butler (1957)

MASSACHUSETTS

Henry Cabot Lodge, Jr.
(1953)
Leverett Saltonstall (1955)

MICHIGAN

Arthur H. Vandenberg
(1953)
Homer Ferguson (1955)

MINNESOTA

Edward J. Thye (1953)
Hubert H. Humphrey
(1955)

MISSISSIPPI

John Cornelius Stennis (1953)*
James O. Eastland (1955)

MISSOURI

James P. Kem (1953)
Thos. C. Hennings, Jr. (1957)

MONTANA

Zales N. Ecton (1953)
James E. Murray (1955)

NEBRASKA

Hugh Butler (1953)
Kenneth S. Wherry (1955)

NEVADA

George W. Malone (1953)
**Pat McCarran* (1957)

NEW HAMPSHIRE

Styles Bridges (1955)
**Charles W. Tobey* (1957)

NEW JERSEY

H. Alexander Smith (1953)
Robert C. Hendrickson (1955)

NEW MEXICO

Dennis Chavez (1953)
Clinton P. Anderson (1955)

NEW YORK

Irving M. Ives (1953)
**Herbert H. Lehman* (1957)

NORTH CAROLINA

Willis Smith (1955)*
**Clyde R. Hoey* (1957)

NORTH DAKOTA

William Langer (1953)
**Milton R. Young* (1957)

OHIO

John W. Bricker (1953)
**Robert A. Taft* (1957)

OKLAHOMA

Robert S. Kerr (1955)
A. S. M. Monroney (1957)

OREGON

Guy Cordon (1955)
**Wayne Morse* (1957)

PENNSYLVANIA

Edward Martin (1953)
James H. Duff (1957)

RHODE ISLAND

John O. Pastore (1953)*
Theodore F. Green (1955)

SOUTH CAROLINA

Burnet R. Maybank (1955)
**Olin D. Johnston* (1957)

SOUTH DAKOTA

Karl E. Mundt (1955)
Francis Case (1957)

TENNESSEE

Kenneth McKellar (1953)
Estes Kefauver (1955)

TEXAS

Tom Connally (1953)
Lyndon B. Johnson (1955)

UTAH

Arthur V. Watkins (1953)
Wallace F. Bennett (1957)

VERMONT

Ralph E. Flanders (1953)
**George D. Aiken* (1957)

VIRGINIA

Harry Flood Byrd (1953)
A. Willis Robertson (1955)

WASHINGTON

Harry P. Cain (1953)
**Warren G. Magnuson* (1957)

WEST VIRGINIA

Harley M. Kilgore (1953)
Matthew M. Neely (1955)

WISCONSIN

Joseph R. McCarthy (1953)
**Alexander Wiley* (1957)

WYOMING

Joseph C. O'Mahoney (1953)
Lester C. Hunt (1955)

* Appointed Dec. 1949 and elected Nov. 1950 to serve remainder of term of Raymond E. Baldwin (R), who resigned Dec. 1949. * Appointed Oct. 1949 and elected Nov. 1950 to serve remainder of term of Bert H. Miller (D), who died Oct. 1949. * Elected Nov. 1947 to serve remainder of term of Theodore G. Bilbo (D), who died Aug. 1947. * Elected Nov. 1950 to serve remainder of term of J. Melville Broughton (D), who died Mar. 1949. By appointment, Frank Porter Graham (D) served Mar. 1949 to Nov. 1950. * Elected Nov. 1950 to serve remainder of term of J. Howard McGrath (D), who resigned Aug. 1949. By appointment, Edward L. Leahy (D) served Aug. 1949 to Nov. 1950.

THE HOUSE OF REPRESENTATIVES

Democrats are in *italic* type; Republicans in roman; Independent in SMALL CAPS. The numerals indicate the Congressional Districts of the states, and the designation At-L means At-Large. An asterisk (*) indicates that the congressman was returned to office in the election of Nov. 7, 1950. The terms of all representatives end Jan. 3, 1953.

ALABAMA

1. **Frank W. Boykin*
2. **George M. Grant*
3. **George W. Andrews*
4. *K. A. Roberts*
5. **Albert Rains*
6. **Edward deGraffenried*
7. **Carl Elliott*
8. **Robert E. Jones, Jr.*
9. **Laurie C. Battle*

ARIZONA

1. **John R. Murdock*
2. **Harold A. Patten*

ARKANSAS

1. **E. C. Gathings*
2. **Wilbur D. Mills*
3. **James W. Trimble*
4. **Boyd Tackett*
5. **Brooks Hays*
6. **W. F. Norrell*
7. **Oren Harris*

CALIFORNIA

1. **Hubert B. Scudder*
2. **Clair Engle*
3. **Leroy Johnson*

4. **Frank R. Havenner*
5. **John F. Shelley*
6. **George P. Miller*
7. **John J. Allen, Jr.*
8. **Jack Z. Anderson*
9. *A. O. Hunter*
10. **Thomas H. Werdel*
11. **Ernest K. Bramblett*
12. *P. J. Hillings*
13. **Norris Poulson*
14. **S. W. Yorty*
15. **Gordon L. McDonough*
16. **Donald L. Jackson*

California—(cont.)

17. **Cecil R. King*
18. **Clyde Doyle*
19. **Chet Holtfield*
20. **Carl Hinshaw*
21. **Harry R. Sheppard*
22. **John Phillips*
23. **Clinton D. McKinnon*

COLORADO

1. *Byron G. Rogers*
2. **William S. Hill*
3. *J. Edgar Chenoweth*
4. **Wayne N. Aspinall*

CONNECTICUT

1. **Abraham A. Ribicoff*
2. *Horace Seely-Brown*
3. **John A. McGuire*
4. *Alfred P. Morano*
5. **James T. Patterson*
- At-L. **Antoni N. Sadiak*

DELAWARE

- At-L. **J. Caleb Boggs*

FLORIDA

1. *C. B. McMullen*
2. **Charles E. Bennett*
3. **Robert L. F. Sikes*
4. *Bill Lantaff*
5. **A. S. Herlong, Jr.*
6. **Dwight L. Rogers*

GEORGIA

1. **Prince H. Preston, Jr.*
2. **E. E. Cox*
3. *E. L. Forrester*
4. **A. Sidney Camp*
5. **James C. Davis*
6. **Carl Vinson*
7. **Henderson Lanham*
8. **W. M. (Don) Wheeler*
9. **John S. Wood*
10. **Paul Brown*

IDAHO

1. *John T. Wood*
2. *Hamer Budge*

ILLINOIS

1. **William L. Dawson*
2. *Richard B. Vail*
3. *F. E. Busbey*
4. *William E. McVey*
5. *J. C. Kluczynski*
6. **Thomas J. O'Brien*
7. **Adolph J. Sabath*
8. **Thomas S. Gordon*

House of Representatives—(cont.)

9. **Sidney R. Yates*
10. **Richard W. Hoffman*
11. *T. P. Sheehan*
12. **Edgar A. Jonas*
13. *Mrs. Ralph E. Church*
14. **Chauncey W. Reed*
15. **Noah M. Mason*
16. **Leo E. Allen*
17. **Leslie C. Arends*
18. **Harold H. Velde*
19. **Robert B. Chipfield*
20. **Sid Simpson*
21. **Peter F. Mack, Jr.*
22. *W. L. Springer*
23. **Edward H. Jenison*
24. **Charles W. Vursell*
25. **Melvin Price*
26. **C. W. (Runt) Bishop*

INDIANA

1. **Ray J. Madden*
2. **Charles A. Halleck*
3. *S. J. Crumpacker, Jr.*
4. *E. Ross Adair*
5. *J. V. Beamer*
6. **Mrs. Cecil M. Harden*
7. *William G. Bray*
8. **Winfield K. Denton*
9. **Earl Wilson*
10. **Ralph Harvey*
11. *C. B. Brownson*

IOWA

1. **Thomas E. Martin*
2. **Henry O. Talle*
3. **H. R. Gross*
4. **Karl M. LeCompte*
5. **Paul Cunningham*
6. **James I. Dolliver*
7. **Ben F. Jensen*
8. **Charles B. Hoeven*

KANSAS

1. **Albert M. Cole*
2. **Errett P. Scrivner*
3. *Myron George*
4. **Edward H. Rees*
5. **Clifford R. Hope*
6. **Wint Smith*

KENTUCKY

1. **Noble J. Gregory*
2. **John A. Whitaker*
3. **Thruston B. Morton*
4. **Frank L. Chelf*
5. **Brent Spence*
6. **Thomas R. Underwood*
7. **Carl D. Perkins*
8. **Joe B. Bates*
9. **James S. Golden*

LOUISIANA

1. **F. Edward Hébert*
2. **Hale Boggs*
3. **Edwin E. Willis*

4. **Overton Brooks*
5. **Otto E. Passman*
6. **James H. Morrison*
7. **Henry D. Larcade, Jr.*
8. **A. Leonard Allen*

MAINE

1. **Robert Hale*
2. **Charles P. Nelson*
3. **Frank Fellows*

MARYLAND

1. **Edward T. Miller*
2. *J. P. S. Devereaux*
3. **Edward A. Garmatz*
4. **George H. Fallon*
5. **Lansdale G. Sasser*
6. **J. Glenn Beall*

MASSACHUSETTS

1. **John W. Heselton*
2. **Foster Furcolo*
3. **Philip J. Philbin*
4. **Harold D. Donohue*
5. **Edith Nourse Rogers*
6. **William H. Bates*
7. **Thomas J. Lane*
8. **Angier L. Goodwin*
9. **Donald W. Nicholson*
10. **Christian A. Herter*
11. **John F. Kennedy*
12. **John W. McCormack*
13. **Richard B. Wigglesworth*
14. **Joseph W. Martin, Jr.*

MICHIGAN

1. *T. M. Machrowicz*
2. *George Meader*
3. **Paul W. Shafer*
4. **Clare E. Hoffman*
5. **Gerald R. Ford, Jr.*
6. **William W. Blackney*
7. **Jesse P. Wolcott*
8. **Fred L. Crawford*
9. *Ruth Thompson*
10. **Roy O. Woodruff*
11. **Charles E. Potter*
12. **John B. Bennett*
13. **George D. O'Brien*
14. **Louis C. Rabaut*
15. **John D. Dingell*
16. **John Lesinski, Jr.*
17. **George A. Dondero*

MINNESOTA

1. **August H. Andresen*
2. **Joseph P. O'Hara*
3. **Roy W. Wier*
4. **Eugene J. McCarthy*
5. **Walter H. Judd*
6. **Fred Marshall*
7. **H. Carl Andersen*
8. **John A. Blatnik*
9. **Harold O. Hagen*

MISSISSIPPI

1. *John E. Rankin
2. *Jamie L. Whitten
3. *Frank E. Smith
4. *Thomas G. Abernethy
5. *Arthur Winstead
6. *William M. Colmer
7. *John Bell Williams

MISSOURI

1. *Clare Magee
2. *Morgan M. Moulder
3. *Phil J. Welch
4. *Leonard Irving
5. *Richard Bolling
6. *George H. Christopher
7. *Dewey Short
8. *A. S. J. Carnahan
9. *Clarence Cannon
10. *Paul C. Jones
11. *John B. Sullivan
12. T. B. Curtis
13. *Frank M. Karsten

MONTANA

1. *Mike Mansfield
2. *Wesley A. D'Ewart

NEBRASKA

1. *Carl T. Curtis
2. H. Buffett
3. *Karl Stefan
4. *A. L. Miller

NEVADA

At-L. *Walter S. Baring

NEW HAMPSHIRE

1. *Chester E. Merrow
2. *Norris Cotton

NEW JERSEY

1. *Charles A. Wolvertson
2. *T. Millet Hand
3. *James C. Auchincloss
4. *Charles R. Howell
5. *Charles A. Eaton
6. *Clifford P. Case
7. *William B. Widnall
8. *Gordon Canfield
9. *Harry L. Towe
10. *Peter W. Rodino, Jr.
11. *Hugh J. Addonizio
12. *Robert W. Kean
13. A. D. Stieminski
14. *Edward J. Hart

NEW MEXICO

At-L. *A. M. Fernandez
At-L. John J. Dempsey

NEW YORK

1. Ernest Greenwood
2. *Leonard W. Hall
3. *Henry J. Latham
4. *L. Gary Clemente
5. *T. Vincent Quinn

6. *James J. Delaney
7. *Louis B. Heller
8. V. L. Anfuso
9. *Eugene J. Keogh
10. *Edna F. Kelly
11. *James J. Heffernan
12. *John J. Rooney
13. *Donald L. O'Toole
14. *Abraham J. Multer
15. *Emanuel Celler
16. *James J. Murphy
17. *Frederic Coudert, Jr.
18. James G. Donovan
19. *Arthur G. Klein
20. *Franklin D. Roosevelt, Jr.
21. *Jacob K. Javits
22. *Adam C. Powell, Jr.
23. S. A. Fine
24. *Isidore Dollinger
25. *Charles A. Buckley
26. *Christopher C. McGrath
27. *Ralph W. Gwinn
28. *Ralph A. Gamble
29. *Katharine St. George
30. J. E. Wharton
31. *Bernard W. Kearney
32. *William T. Byrne
33. *Dean P. Taylor
34. *Clarence E. Kilburn
35. W. R. Williams
36. *R. Walter Riehman
37. *Edwin Arthur Hall
38. *John Taber
39. *W. Sterling Cole
40. *Kenneth B. Keating
41. H. C. Ostertag
42. W. E. Miller
43. E. P. Radwan
44. John C. Butler
45. *Daniel A. Reed

NORTH CAROLINA

1. *Herbert C. Bonner
2. *John H. Kerr
3. *Graham A. Barden
4. *Harold D. Cooley
5. *Thurmond Chatham
6. *Carl T. Durham
7. *F. Ertel Carlyle
8. *Charles B. Deane
9. *Robert L. Doughton
10. *Hamilton C. Jones
11. W. W. Jones
12. *Monroe M. Redden

NORTH DAKOTA

At-L. F. G. Aandahl
At-L. *Usher L. Burdick

OHIO

1. *Charles H. Elston
2. W. E. Hess
3. *Edward Breen
4. *William M. McCulloch
5. *Cliff Clevenger
6. *James G. Polk
7. *Clarence J. Brown

8. J. E. Betts
9. F. REAMS
10. *Thomas A. Jenkins
11. *Walter E. Brehm
12. *John M. Varys
13. *Alvin F. Welchel
14. W. H. Ayres
15. *Robert T. Secrest
16. Frank T. Bow
17. *J. Harry McGregor
18. *Wayne L. Hays
19. *Michael J. Kirwan
20. *Michael A. Feighan
21. *Robert Crosser
22. *Frances P. Bolton
- At-L. G. H. Bender

OKLAHOMA

1. G. B. Schwabe
2. *William G. Stigler
3. *Carl Albert
4. *Tom Steed
5. John Jarman
6. *Toby Morris
7. *Victor Wickersham
8. P. Belcher

OREGON

1. *Walter Norblad
2. *Lowell Stockman
3. *Homer D. Angell
4. *Harris Ellsworth

PENNSYLVANIA

1. *William A. Barrett
2. *William T. Granahan
3. *Hardie Scott
4. *Earl Chudoff
5. *William J. Green, Jr.
6. *Hugh D. Scott, Jr.
7. *Benjamin F. James
8. A. C. Vaughn
9. *Paul B. Dague
10. *Harry P. O'Neill
11. *Daniel J. Flood
12. *Ivor D. Fenton
13. *George M. Rhodes
14. *Wilson D. Gillette
15. A. R. Bush
16. *Samuel K. McConnell, Jr.
17. *Richard M. Simpson
18. W. M. Mumma
19. *Leon H. Gavin
20. *Francis E. Walter
21. *James F. Lind
22. *James E. Van Zandt
23. E. L. Sittler, Jr.
24. *Thomas E. Morgan
25. *Louis E. Graham
26. *John P. Saylor
27. *Augustine B. Kelley
28. *Carroll D. Kearns
29. *Harry J. Davenport
30. *Robert J. Corbett
31. *James G. Fulton
32. *Herman P. Eberharter
33. *Frank Buchanan

House of Representatives—(cont.)

RHODE ISLAND

1. *Aime J. Forand
2. *John E. Fogarty

SOUTH CAROLINA

1. *L. Mendel Rivers
2. John J. Riley
3. W. J. B. Dorn
4. *Joseph R. Bryson
5. *James P. Richards
6. *John L. McMillan

SOUTH DAKOTA

1. *Harold O. Lovre
2. E. Y. Berry

TENNESSEE

1. B. C. Reese
2. H. H. Baker
3. *James B. Frazier, Jr.
4. *Albert Gore
5. *Joe L. Evins
6. *J. Percy Priest
7. *Pat Sutton
8. *Tom Murray
9. *Jere Cooper
10. *Clifford Davis

TEXAS

1. *Wright Patman
2. *J. M. Combs
3. *Lindley Beckworth
4. *Sam Rayburn
5. *J. Frank Wilson
6. *Olin E. Teague
7. *Tom Pickett

8. *Albert Thomas
9. *Clark W. Thompson
10. *Homer Thornberry
11. *W. R. Poage
12. *Wingate H. Lucas
13. *Ed Gossett
14. *John E. Lyle, Jr.
15. *Lloyd M. Bentsen, Jr.
16. *Ken Regan
17. *Omar Burleson
18. Walter Rogers
19. *George H. Mahon
20. *Paul J. Kilday
21. *O. C. Fisher

UTAH

1. *Walter K. Granger
2. *Reva Beck Bosone

VERMONT

At-L. W. L. Prouty

VIRGINIA

1. E. J. Robeson, Jr.
2. *Porter Hardy, Jr.
3. *J. Vaughan Gary
4. *Watkins M. Abbitt
5. *Thomas B. Stanley
6. *Clarence G. Burton
7. *Burr P. Harrison
8. *Howard W. Smith
9. *Tom B. Fugate

WASHINGTON

1. *Hugh B. Mitchell
2. *Henry M. Jackson
3. *Russell V. Mack

4. *Hal Holmes
5. *Walt Horan
6. *Thor C. Tollefson

WEST VIRGINIA

1. *Robert L. Ramsay
2. *Harley O. Staggers
3. *Cleveland M. Bailey
4. *M. G. Burnside
5. *John Kee
6. *E. H. Hedrick

WISCONSIN

1. *Lawrence H. Smith
2. *Glenn R. Davis
3. *Gardner R. Withrow
4. *Clement J. Zablocki
5. C. J. Kerster
6. W. K. Van Pelt
7. *Reid F. Murray
8. *John W. Byrnes
9. *Merlin Hull
10. *Alvin E. O'Konski

WYOMING

At-L. W. H. Harrison

ALASKA

*E. L. Bartlett¹

HAWAII

*Joseph R. Farrington²

PUERTO RICO

A. Fernós-Isern³

¹ Elected in state election of Sept. 11, 1950. ² Delegate. Does not have a vote. ³ Resident Commissioner, elected 1948; Popular Democrat. Does not have a vote.

Congressional Committees

Source: Congressional Directory.

Under the Legislative Reorganization Act of 1946, the number of standing committees of the Senate was reduced from thirty-three to fifteen, and committees of the House of Representatives from forty-five to nineteen. This reduction became effective January 3, 1947, the opening date of the 80th Congress.

Committees	Members		Committees	Members	
	S	H		S	H
Agriculture	..	30	Interstate and Foreign Com-		
Agriculture and Forestry	13	45	merce	13	27
Appropriations	21	45	Judiciary	13	27
Armed Services	13	36	Labor and Public Welfare	13	..
Banking and Currency	13	27	Merchant Marine and Fisheries	..	26
District of Columbia	13	25	P. O. and Civil Service	13	25
Education and Labor	..	25	Public Lands	..	28
Expenditures in Exec. Dept.'s	13	25	Public Works	13	27
Finance	13	..	Rules	..	12
Foreign Affairs	..	25	Rules and Administration	13	..
Foreign Relations	13	..	Un-American Activities	..	9
House Administration	..	25	Veterans' Affairs	..	27
Interior and Insular Affairs	13	..	Ways and Means	..	25

UNITED STATES STATISTICS

Geographic Data

Source: U. S. Coast and Geodetic Survey.

Highest point: Mt. Whitney, Calif.*	14,495 ft.
Lowest point: Death Valley, Calif.*	280 ft. below sea level
Most northern point: Lake of the Woods projection, Minn.	49° 23' 04.5" N. lat.
Most southern point: Cape Sable, Fla.	25° 07' N. lat.
Most eastern point: West Quoddy Head, Maine	66° 57' W. long.
Most western point: Cape Alava, Wash.	124° 44' W. long.
Places farthest apart: Cape Flattery, Wash., to a point on the Florida coast south of Miami	2,835 mi.
Geographic center: near Lebanon, Smith County, Kans.	39° 50' N. lat. 98° 35' W. long.
Northern boundary: Canada and Great Lakes	3,987 mi.
Southern boundary: Gulf of Mexico and Mexican boundary	5,654 mi.
Eastern boundary: Atlantic tidal coastline	5,565 mi.
Western boundary: Pacific tidal coastline	2,730 mi.
Total U. S. boundary	17,936 mi.

* The highest and lowest points in the U. S. are 86 mi. apart.

Territorial Expansion of the United States

Accession	Date	Area sq. mi. ¹
CONTINENTAL UNITED STATES		
Territory in 1790 ²		888,811
Louisiana Purchase	1803	827,192
Florida	1819	58,560
By treaty with Spain	1819	13,443
Texas	1845	390,144
Oregon	1846	285,580
Mexican Cession	1848	529,017
Gadsden Purchase	1853	29,640
Total		3,022,387

OUTLYING TERRITORY³

Alaska Territory	1867	586,400
Hawaii Territory ⁴	1898	6,454
Puerto Rico	1899	3,435
Guam	1899	206
American Samoa	1900	76
Panama Canal Zone	1904	553
Virgin Islands of U. S.	1917	133
Trust territory ⁵	1947	846
Total		598,103
Aggregate		3,620,490

¹ Total land and inland water area.

² Includes drainage basin of Red River of the North, not part of any accession, but in the past sometimes considered a part of the Louisiana Purchase.

³ The Philippine Islands, acquired in 1899, became independent on July 4, 1946.

⁴ Includes Baker, Canton, Enderbury, Howland, Jarvis, Johnston, and Midway Islands; also certain other outlying islands (21 sq. mi.).

⁵ Consists of the Marianas, Caroline, and Marshall Islands, formerly held by Japan under mandate.

U. S. Water Area Other Than Inland Water

	Sq. mi.
Atlantic Ocean	2,298
Chesapeake Bay	3,237
Delaware Bay	665
Erie, Lake	5,002
Georgia and Juan de Fuca, Straits of	1,610
Huron, Lake	8,975
Long Island Sound	1,299
Mexico, Gulf of	3,837
Michigan, Lake	22,178
New York Harbor	92
Ontario, Lake	3,033
Pacific Ocean	343
Puget Sound	561
St. Clair, Lake	116
Superior, Lake	21,118
Total	74,364

U. S. Population and Area

Census	Population of continental U. S.	Increase over the preceding census		Land area sq. mi.	Pop. per sq. mi.
		Number	Per cent		
1790...	3,929,214			867,980	4.5
1800...	5,308,483	1,379,269	35.1	867,980	6.1
1810...	7,239,881	1,931,398	36.4	1,685,865	4.3
1820...	6,938,453	2,398,572	33.1	1,753,588	5.5
1830...	12,866,020	3,227,567	33.5	1,753,588	7.3
1840...	17,069,453	4,203,433	32.7	1,753,588	9.7
1850...	23,191,876	6,122,423	35.9	2,944,337	7.9
1860...	31,443,321	8,251,445	35.6	2,973,965	10.6
1870...	39,818,449	8,375,128	26.6	2,973,965	13.4
1880...	50,155,783	10,337,334	26.0	2,973,965	16.9
1890...	62,947,714	12,791,931	25.5	2,973,965	21.2
1900...	75,994,575	13,046,861	20.7	2,974,159	25.6
1910...	91,972,266	15,977,691	21.0	2,973,890	30.9
1920...	105,710,620	13,738,354	14.9	2,973,776	35.5
1930...	122,775,046	17,064,426	16.1	2,977,128	41.2
1940...	131,669,275	8,894,229	7.2	2,977,128	44.2
1950...	150,555,592	18,886,317	14.3	2,977,128	50.6

Sources: U. S. Bureau of the Census.

Highest, Lowest, and Average Altitudes in the United States

(Revised June, 1950)

Source: U. S. Geological Survey.

State	Average elevation, ft.	Highest point	Elevation, ft.	Lowest point	Elevation, ft.
Alabama.....	500	Cheaha Mountain.....	2,407	Gulf of Mexico.....	Sea level
Arizona.....	4,100	Humphreys Peak.....	12,655	Colorado River.....	100
Arkansas.....	650	Blue Mountain.....	2,800	Ouachita River.....	55
		Magazine Mountain.....			
California.....	2,900	Mount Whitney.....	14,495	Death Valley.....	280*
Colorado.....	6,800	Mount Elbert.....	14,431	Arkansas River.....	3,350
Connecticut.....	500	N. Bdy.-Mt. Frissell.....	2,380	Long Island Sound.....	Sea level
Delaware.....	60	Centerville.....	440	Atlantic Ocean.....	Sea level
D. C.....	150	Tenleytown.....	420	Potomac River.....	Sea level
Florida.....	100	Sec. 30, T6N, R20W.....	345	Atlantic Ocean.....	Sea level
Georgia.....	600	Brasstown Bald.....	4,784	Atlantic Ocean.....	Sea level
Idaho.....	5,000	Borah Peak.....	12,655	Snake River.....	720
Illinois.....	600	Charles Mound.....	1,241	Mississippi River.....	279
Indiana.....	700	Greensfork Township.....	1,240	Ohio River.....	320
Iowa.....	1,100	In Osceola County.....	1,675	Mississippi River.....	480
Kansas.....	2,000	In T15S R43W.....	4,135	Verdigris River.....	700
Kentucky.....	750	Big Black Mountain.....	4,150	Mississippi River.....	257
Louisiana.....	100	Driskill Mountain.....	535	New Orleans.....	5*
Maine.....	600	Mount Katahdin.....	5,268	Atlantic Ocean.....	Sea level
Maryland.....	350	Backbone Mountain.....	3,360	Atlantic Ocean.....	Sea level
Massachusetts.....	500	Mount Greylock.....	3,491	Atlantic Ocean.....	Sea level
Michigan.....	900	Porcupine Mountains.....	2,023	Lake Erie.....	572
Minnesota.....	1,200	Misquah Hills.....	2,230	Lake Superior.....	602
Mississippi.....	300	Woodall Mountain.....	806	Gulf of Mexico.....	Sea level
Missouri.....	800	Taum Sauk Mountain.....	1,772	St. Francis River.....	230
Montana.....	3,400	Granite Peak.....	12,850	Kootenai River.....	1,800
Nebraska.....	2,600	Epworth Township.....	5,340	Southeast corner of State.....	840
Nevada.....	5,500	Boundary Peak, White Mountains.....	13,145	Colorado River.....	470
New Hampshire.....	1,000	Mount Washington.....	6,288	Atlantic Ocean.....	Sea level
New Jersey.....	250	High Point.....	1,801	Atlantic Ocean.....	Sea level
New Mexico.....	5,700	Wheeler Peak.....	13,151	Red Bluff Reservoir.....	2,817
New York.....	1,000	Mount Marcy.....	5,344	Atlantic Ocean.....	Sea level
North Carolina.....	700	Mount Mitchell.....	6,684	Atlantic Ocean.....	Sea level
North Dakota.....	1,900	Black Butte.....	3,468	Red River.....	750
Ohio.....	850	Campbell Hill.....	1,550	Ohio River.....	433
Oklahoma.....	1,300	Black Mesa.....	4,978	Red River.....	300
Oregon.....	3,300	Mount Hood.....	11,245	Pacific Ocean.....	Sea level
Pennsylvania.....	500	Mt. Davis, Negro Mountains.....	3,213	Delaware River.....	Sea level
Rhode Island.....	200	Jerimoth Hill.....	812	Atlantic Ocean.....	Sea level
South Carolina.....	350	Sassafras Mountain.....	3,560	Atlantic Ocean.....	Sea level
South Dakota.....	2,200	Harney Peak.....	7,242	Big Stone Lake.....	962
Tennessee.....	900	Clingmans Dome.....	6,642	Mississippi River.....	182
Texas.....	1,700	Guadalupe Peak.....	8,751	Gulf of Mexico.....	Sea level
Utah.....	6,100	Kings Peak.....	13,498	Beaverdam Creek.....	2,000
Vermont.....	1,000	Mount Mansfield.....	4,393	Lake Champlain.....	95
Virginia.....	950	Mount Rogers.....	5,720	Atlantic Ocean.....	Sea level
Washington.....	1,700	Mount Rainier.....	14,408	Pacific Ocean.....	Sea level
West Virginia.....	1,500	Spruce Knob.....	4,860	Potomac River.....	240
Wisconsin.....	1,050	Sugarbush Hill.....	1,951	Lake Michigan.....	581
Wyoming.....	6,700	Gannett Peak.....	13,785	Belle Fourche River.....	3,100

* Below sea level.

Forest Resources of the United States

The forests of the United States include over 800 different kinds of trees and still cover millions of acres. But since the days when half of the United States was forest, the amount of commercial forest land has decreased by about half, and the condition of many of the remaining forests has deteriorated badly, necessitating a forest rehabilitation program.

United States Forest Land, 1945

(in acres)

Old growth.....	44,618,000
Second-growth saw timber.....	180,558,000
Pole timber.....	95,013,000
Seedling and sapling area.....	85,552,000
Poorly stocked and denuded area.....	75,303,000
Total.....	461,044,000

Mountain Peaks in the U. S. Over 14,000 Feet

Source: U. S. Geological Survey.

Mountain	State	County	Height, feet
Mt. Whitney	California	Tulare-Inyo	14,495
Mt. Elbert	Colorado	Lake	14,431
Mt. Massive	Colorado	Lake	14,418
Mt. Rainier	Washington	Pierce	14,408
Mt. Harvard	Colorado	Chaffee	14,399
Mt. Williamson	California	Inyo	14,384
La Plata Peak	Colorado	Chaffee	14,340
Blanca Peak	Colorado	Costilla-Huerfano-Alamosa	14,310
Uncompahgre Peak	Colorado	Hinsdale	14,301
Crestone Peak	Colorado	Custer-Saguache	14,291
Mt. Lincoln	Colorado	Park	14,284
Grays Peak	Colorado	Clear Creek-Summit	14,274
Torreys Peak	Colorado	Clear Creek-Summit	14,264
Mt. Evans	Colorado	Clear Creek	14,260
Castle Peak	Colorado	Gunnison-Pitkin	14,259
Quandary Peak	Colorado	Summit	14,258
Longs Peak	Colorado	Boulder	14,255
Mt. Sill	California	Fresno	14,254
North Palisade	California	Fresno	14,254
Mt. Willson	Colorado	Dolores	14,250
Mt. Antero	Colorado	Chaffee	14,245
White Mountain	California	Alpine-Mono	14,242
Mt. Cameron	Colorado	Park	14,238
Mt. Russell	California	Inyo	14,190
Shavano Peak	Colorado	Chaffee	14,179
Mt. Princeton	Colorado	Chaffee	14,177
Mt. Yale	Colorado	Chaffee	14,172
Mt. Bross	Colorado	Park	14,169
Mt. Shasta	California	Siskiyou	14,161
Point Success	Washington	Pierce	14,150
San Luis Peak	Colorado	Saguache	14,149
Mt. Sneffels	Colorado	Ouray	14,143
Mt. Democrat	Colorado	Park-Lake	14,142
Crestone Needle	Colorado	Custer-Saguache	14,130
Maroon Peak	Colorado	Pitkin	14,126
Old Baldy	Colorado	Costilla	14,125
Liberty Cap	Washington	Pierce	14,112
Pikes Peak	Colorado	El Paso	14,110
Kit Carson Peak	Colorado	Saguache	14,100
Humboldt Peak	Colorado	Custer	14,100
Windom Peak	Colorado	La Plata	14,091
Mt. Eolus	Colorado	La Plata	14,086
Snowmass Mountain	Colorado	Pitkin-Gunnison	14,077
Mt. Columbia	Colorado	Chaffee	14,070
Culebra Peak	Colorado	Costilla-Las Animas	14,069
Sunlight Peak	Colorado	La Plata	14,060
Split Mountain	California	Fresno-Inyo	14,051
Redcloud Peak	Colorado	Hinsdale	14,050
Middle Palisade	California	Fresno	14,049
Mt. Bierstadt	Colorado	Clear Creek	14,046
Mt. Corcoran	California	Tulare	14,042
Mt. Sherman	Colorado	Park-Lake	14,037
Stewart Peak	Colorado	Saguache	14,032
Wilson Peak	Colorado	San Miguel	14,026
Mt. Muir	California	Tulare	14,025
Mt. Tyndall	California	Tulare	14,025
Wetterhorn Peak	Colorado	Hinsdale-Ouray	14,020
Grizzly Mountain	Colorado	Pitkin-Chaffee	14,020
Sunshine Peak	Colorado	Hinsdale	14,018
Handles Peak	Colorado	Hinsdale	14,013
North Maroon Peak	Colorado	Pitkin	14,010
Mt. Barnard	California	Tulare-Inyo	14,003
Pyramid Peak	Colorado	Pitkin	14,000

Rivers of the U. S.

(300 or more miles long)

ALABAMA (315 mi.): From junction of Tallapoosa R. and Coosa R. in Alabama to junction with Tombigbee R. to form Mobile R. and Tensaw R.

ALLEGHENY (325 mi.): From Potter Co. in Pennsylvania to junction with Monongahela R. at Pittsburgh to form Ohio R.

ARKANSAS (1,450 mi.): From Lake Co. in Colorado to Mississippi R. in Arkansas.

BIG BLACK (330 mi.): From Webster Co. in Mississippi to Mississippi R.

BIGHORN (336 mi.): From junction of Popo Agie R. and Wind R. in Wyoming to Yellowstone R. in Montana.

BRAZOS (870 mi.): From junction of Salt Fork and Clear Fork in Texas to Gulf of Mexico.

CANADIAN (906 mi.): From Colfax Co. in New Mexico to Arkansas R. in Oklahoma.

CEDAR (329 mi.): From south central Minnesota to Iowa R. in Iowa.

CHATTAHOOCHEE (410 mi.): From Towns Co. in Georgia to junction with Flint R. to form Apalachicola R.

CIMARRON (600 mi.): From Colfax Co. in New Mexico to Arkansas R. in Oklahoma.

CLARK FORK (c. 300 mi.): From Silver Bow Co. in Montana to Pend Oreille Lake in Idaho.

COLORADO (1,450 mi.): From Grand Co. in Colorado to Gulf of California in Mexico.

COLORADO (840 mi.): From Dawson Co. in Texas to Matagorda Bay.

COLUMBIA (1,270 mi.): From Columbia Lake in British Columbia to Pacific Ocean between Oregon and Washington.

CONNECTICUT (407 mi.): From Connecticut Lakes in New Hampshire to Long Island Sound in Connecticut.

CUMBERLAND (687 mi.): From junction of forks in Harlan Co. in Kentucky to Ohio R.

DAKOTA (Sometimes called JAMES) (710 mi.): From Wells Co. in North Dakota to Missouri R. in South Dakota.

DES MOINES (327 mi.): From junction of forks in Humboldt Co. in Iowa to Mississippi R.

GILA (c. 630 mi.): From southwest New Mexico to Colorado R. in Arizona.

GREEN (360 mi.): From Lincoln Co. in Kentucky to Ohio R. in Indiana.

GREEN (730 mi.): From Sublette Co. in Wyoming to Colorado R. in Utah.

HUDSON (306 mi.): From Essex Co. in New York to Upper New York Bay between New York and New Jersey.

JAMES (340 mi.): From junction of Jackson R. and Cowpasture R. in Virginia to Chesapeake Bay.

LITTLE COLORADO (300 mi.): From Apache Co. in Arizona to Colorado R.

LITTLE MISSOURI (560 mi.): From northeast Wyoming to Missouri R. in North Dakota.

MILK (625 mi.): From Glacier Co. in Montana to Missouri R.

MINNESOTA (332 mi.): From Big Stone Lake between Minnesota and South Dakota to Mississippi R. at St. Paul.

MISSISSIPPI (2,470 mi.): From Lake Itasca in Minnesota to Gulf of Mexico in Louisiana.

MISSOURI (2,475 mi.): From junction of Jefferson R., Madison R., and Gallatin R. in Montana to Mississippi R. near St. Louis.

NEOSHO (460 mi.): From Morris Co. in Kansas to Arkansas R. in Oklahoma.

NIOBRARA (431 mi.): From Niobrara Co. in Wyoming to Missouri R. in Nebraska.

NORTH CANADIAN (760 mi.): From Union Co. in New Mexico to Canadian R. in Oklahoma.

NORTH PLATTE (618 mi.): From Jackson Co. in Colorado to junction with So. Platte R. in Nebraska to form Platte R.

NUECES (338 mi.): From near Edwards-Réal Co. border in Texas to Nueces Bay.

OHIO (981 mi.): From junction of Allegheny R. and Monongahela R. at Pittsburgh to Mississippi R. between Illinois and Kentucky.

OSAGE (500 mi.): From junction of Elm Creek and Onion Creek in Kansas to Missouri R. in Missouri.

OUACHITA (605 mi.): From Polk Co. in Arkansas to Black R. in Louisiana.

PEARL (490 mi.): From Neshoba Co. in Mississippi to Gulf of Mexico between Mississippi and Louisiana.

PECOS (735 mi.): From Mora Co. in New Mexico to Rio Grande in Texas.

PLATTE (310 mi.): From junction of North Platte R. and South Platte R. in Nebraska to Missouri below Omaha.

PLATTE (c. 300 mi.): From Union Co. in Iowa to Missouri R. in Missouri.

POWDER (375 mi.): From junction of forks in Johnson Co. in Wyoming to Yellowstone R. in Montana.

RED (1,018 mi.): From junction of forks in Tillman Co. in Oklahoma to Mississippi R. in Louisiana.

RED (Sometimes called RED RIVER OF THE NORTH) (c. 310 mi.): From junction of Otter Tail R. and Bois de Sioux R. in Minnesota to Lake Winnipeg in Manitoba.

REPUBLICAN (445 mi.): From eastern Colorado to junction with Smoky Hill R. in Kansas to form Kansas R.

RIO GRANDE (1,800 mi.): From San Juan Co. in Colorado to Gulf of Mexico between Texas and Mexico.

ROANOKE (380 mi.): From junction of forks in Montgomery Co. in Virginia to Albemarle Sound in North Carolina.

ROCK (300 mi.): From Washington Co. in Wisconsin to Mississippi R. in Illinois.

SABINE (380 mi.): From junction of forks in Hunt Co. in Texas to Sabine Lake between Texas and Louisiana.

SACRAMENTO (382 mi.): From Siskiyou Co. in California to Suisun Bay.

SAINT FRANCIS (425 mi.): From Iron Co. in Missouri to Mississippi R. in Arkansas.

SALMON (420 mi.): From Custer Co. in Idaho to Snake R.

SAN JOAQUIN (350 mi.): From junction of forks in Madera Co. in California to Sacramento R.

SAN JUAN (360 mi.): From Archuleta Co. in Colorado to Colorado R. in Utah.

SAVANNAH (314 mi.): From junction of Tugaloo R. and Seneca R. in South Carolina to Atlantic Ocean between Georgia and South Carolina.

SMOKY HILL (540 mi.): From Cheyenne Co. in Colorado to junction with Republican R. in Kansas to form Kansas R.

SNAKE (1,038 mi.): From Yellowstone National Park in Wyoming to Columbia R. in Washington.

SOUTH PLATTE (424 mi.): From Park Co. in Colorado to junction with North Platte R. in Nebraska to form Platte R.

SUSQUEHANNA (444 mi.): From Otsego Co. in New York to Chesapeake Bay in Maryland.

TALLAHATCHIE (301 mi.): From Tiupah Co. in Mississippi to junction with Yalobusha R. to form Yazoo R.

TENNESSEE (652 mi.): From junction of Holston R. and French Broad R. near Knoxville to Ohio R. in Kentucky.

TOMBIGBEE (409 mi.): From junction of forks near Amory, Mississippi, to junction with Alabama R. in Alabama to form Mobile R. and Tensaw R.

TRINITY (360): From junction of forks in Kaufman Co. in Texas to Galveston Bay.

WABASH (475 mi.): From Darke Co. in Ohio to Ohio R. between Illinois and Indiana.

WASHITA (500 mi.): From Hemphill Co. in Texas to Red R. in Oklahoma.

WHITE (690 mi.): From Madison Co. in Arkansas to Mississippi R.

WISCONSIN (430 mi.): From Vilas Co. in Wisconsin to Mississippi R.

YELLOWSTONE (671 mi.): From Park Co. in Wyoming to Missouri R. in North Dakota.

Abbreviations of the States

Alabama	Ala.	Nebraska	Nebr., Neb.
Arizona	Ariz.	Nevada	Nev.
Arkansas	Ark.	New Hampshire	N. H.
California	Calif., Cal.	New Jersey	N. J.
Colorado	Colo., Col.	New Mexico	N. Mex., N. M.
Connecticut	Conn.	New York	N. Y.
Delaware	Del.	North Carolina	N. C.
District of Columbia	D. C.	North Dakota	N. Dak., N. D.
Florida	Fla.	Ohio	(none), O.
Georgia	Ga.	Oklahoma	Okla.
Idaho	(none), Ida., Id.	Oregon	Oreg., Ore.
Illinois	Ill.	Pennsylvania	Pa., Penn., Penna.
Indiana	Ind.	Rhode Island	R. I.
Iowa	(none), Ia.	South Carolina	S. C.
Kansas	Kans., Kan.	South Dakota	S. Dak., S. D.
Kentucky	Ky.	Tennessee	Tenn.
Louisiana	La.	Texas	Tex.
Maine	(none), Me.	Utah	(none), Ut.
Maryland	Md.	Vermont	Vt.
Massachusetts	Mass.	Virginia	Va.
Michigan	Mich.	Washington	Wash.
Minnesota	Minn.	West Virginia	W. Va.
Mississippi	Miss.	Wisconsin	Wis., Wisc.
Missouri	Mo.	Wyoming	Wyo., Wy.
Montana	Mont.		

NOTE: Where more than one abbreviation is given, the first is the one preferred by the U. S. Post Office Department for use in addresses. The designation *(none)* means the Department prefers the state not be abbreviated.

Climate of Selected U. S. Cities

Source: U. S. Weather Bureau.

State and city	Average mean temperature, F			Average annual precipitation, inches	Average annual snowfall, inches	Average annual % possible sunshine	Average annual relative humidity
	Jan.	July	Annual				
Alabama: Mobile.....	52.0	81.4	67.5	61.12	.2	61	77
Montgomery.....	49.0	81.6	65.8	51.64	.7	63	71
Arizona: Phoenix.....	51.8	90.5	70.3	7.72	Trace	85	42
Arkansas: Little Rock.....	41.9	82.4	62.5	48.06	4.8	62	71
California: Fresno.....	46.1	82.0	63.3	9.35	.1	80	56
Los Angeles.....	55.5	70.6	63.0	15.24	Trace	72	68
San Francisco.....	47.8	60.8	55.7	17.52	Trace	66	78
Colorado: Denver.....	30.6	72.6	50.5	14.00	55.4	67	52
D. C.: Washington.....	34.6	77.2	55.6	42.02	20.4	57	67
Florida: Jacksonville.....	56.0	81.9	69.4	51.35	Trace	62	76
Miami.....	68.2	81.6	75.1	55.81	.0	66	78
Georgia: Atlanta.....	43.4	78.6	61.5	48.68	1.9	62	69
Idaho: Boise.....	26.8	74.1	50.7	11.52	19.8	61	60
Illinois: Chicago.....	24.9	73.3	49.5	32.86	33.1	59	72
Indiana: Indianapolis.....	28.4	75.7	52.7	39.90	20.7	57	70
Iowa: Des Moines.....	21.3	76.2	50.0	31.94	32.2	60	72
Kansas: Wichita.....	32.0	80.1	56.6	30.32	14.2	68	66
Kentucky: Louisville.....	34.8	78.6	57.0	42.59	13.5	58	69
Louisiana: New Orleans.....	54.9	82.4	69.6	60.37	.2	59	78
Maine: Eastport.....	21.0	60.4	41.8	38.91	70.6	50	79
Massachusetts: Boston.....	28.5	72.0	49.9	40.62	43.0	57	68
Michigan: Detroit.....	25.0	72.7	48.7	31.54	39.1	52	72
Sault Ste. Marie.....	14.4	64.0	39.8	30.06	81.8	45	78
Minnesota: Minneapolis.....	13.9	73.2	45.1	26.88	40.8	56	68
Mississippi: Vicksburg.....	48.4	81.4	65.8	51.72	1.7	62	74
Missouri: Kansas City.....	29.9	79.4	55.4	36.45	20.8	64	66
St. Louis.....	32.3	79.8	56.6	39.26	17.7	59	67
Montana: Helena.....	20.3	67.7	43.7	12.66	54.2	58	59
Miles City.....	17.1	74.3	45.9	13.17	32.2	63	62
Nebraska: North Platte.....	23.9	75.0	49.5	18.24	25.3	69	67
Omaha.....	22.3	77.5	51.1	27.88	28.3	61	67
Nevada: Winnemucca.....	28.0	71.9	48.7	8.52	27.9	73	52
New Jersey: Atlantic City.....	33.9	72.8	52.9	41.06	14.9	60	78
New Mexico: Albuquerque.....	33.8	77.8	56.0	8.91	9.2	76	46
New York: Albany.....	23.6	72.4	48.3	36.73	50.0	53	72
New York: New York.....	31.4	74.4	52.6	42.92	31.3	60	70
Rochester.....	23.0	70.7	47.5	32.83	78.7	50	73
North Carolina: Asheville.....	38.8	73.0	55.7	38.16	11.4	57	76
Raleigh.....	42.2	78.6	60.4	46.74	7.4	60	72
North Dakota: Bismarck.....	8.5	70.6	41.2	16.41	34.2	58	70
Ohio: Cleveland.....	24.7	71.9	48.7	33.82	41.4	51	71
Oklahoma: Oklahoma City.....	37.4	81.4	60.2	31.79	7.9	66	66
Oregon: Portland.....	39.4	67.6	53.6	41.89	12.5	48	73
Pennsylvania: Harrisburg.....	30.4	75.1	52.6	37.69	31.7	56	67
Pittsburgh.....	31.0	74.4	52.6	35.95	33.9	49	68
South Carolina: Charleston.....	50.5	81.6	66.2	47.59	.2	66	77
South Dakota: Huron.....	12.8	73.1	44.6	19.52	28.6	62	71
Tennessee: Nashville.....	39.2	79.4	59.3	46.25	8.3	59	69
Texas: Amarillo.....	33.1	75.9	54.6	20.99	20.6	77	60
El Paso.....	44.6	81.9	63.8	8.80	2.5	80	40
Fort Worth.....	46.0	84.0	65.7	32.11	2.6	67	65
Houston.....	53.4	83.2	69.2	46.26	.2	59	76
Utah: Salt Lake City.....	25.4	76.8	51.0	13.88	48.4	69	57
Vermont: Burlington.....	18.5	70.0	44.7	32.24	65.1	46	75
Virginia: Norfolk.....	41.8	78.5	59.8	45.36	9.0	61	72
Richmond.....	38.6	78.0	58.4	41.89	12.7	60	72
Washington: Seattle.....	40.4	64.4	52.0	33.44	11.4	43	76
Spokane.....	27.2	70.3	48.5	15.95	36.2	54	63
West Virginia: Parkersburg.....	33.5	75.4	54.4	38.95	24.3	48	74
Wisconsin: Madison.....	17.6	72.6	46.2	31.08	37.7	53	74
Wyoming: Cheyenne.....	25.9	67.4	44.9	14.84	56.6	66	57

Coastline of the United States

Source: U. S. Coast and Geodetic Survey.

State	Lengths in statute miles		
	General coastline*	Tidal shoreline, general†	Tidal shoreline, detailed‡
Maine.....	228	676	3,478
New Hampshire.....	13	14	131
Massachusetts.....	192	453	1,519
Rhode Island.....	40	156	384
Connecticut.....	...	96	618
New York.....	127	470	1,850
New Jersey.....	130	398	1,792
Pennsylvania.....	...	...	89
Delaware.....	28	79	381
Maryland.....	31	452	3,190
Virginia.....	112	567	3,315
North Carolina.....	301	1,030	3,375
South Carolina.....	187	758	2,876
Georgia.....	100	603	2,344
Florida (Atlantic).....	399	618	3,035
Total Atlantic coast.....	1,888	6,370	28,377
Florida (Gulf).....	798	1,658	5,391
Alabama.....	53	199	607
Mississippi.....	44	155	359
Louisiana.....	397	985	7,721
Texas.....	367	1,100	3,359
Total Gulf coast.....	1,659	4,097	17,437
California.....	840	1,190	3,427
Oregon.....	296	312	1,410
Washington.....	157	908	3,026
Total Pacific coast.....	1,293	2,410	7,863
Total U. S.....	4,840	12,877	53,677

* Figures are lengths of general outline of seacoast. Measurements made with unit measure of 30 minutes of latitude on charts as near scale of 1:1,200,000 as possible. Shoreline of bays and sounds is included to point where they narrow to width of unit measure, and distance across at such point is included. † Measurements made with unit measure of 3 statute miles on charts of 1:200,000 and 1:400,000 scale when available. Shoreline of bays, sounds and other bodies of water included to point where they narrow to width of 3 statute miles, and distance across at such point is included. ‡ Figures obtained in 1939-40 with recording measure on largest scale maps and charts then available. Shoreline of bays, sounds and other bodies of water included to head of tide-water, or to point where they narrow to width of 100 feet.

Arrival and Departure of Aliens

Source: Immig. & Naturalization Service.

Year	Aliens admitted *	Aliens departed †	Excess of admissions	Aliens debarred	Aliens deported
1920.....	621,576	428,062	193,514	11,795	2,762
1921.....	978,163	426,031	552,132	13,779	4,517
1922.....	432,505	345,384	87,121	13,731	4,345
1923.....	673,406	200,586	472,820	20,619	3,661
1924.....	879,302	216,745	662,557	30,284	6,409
1925.....	458,435	225,490	232,945	25,390	9,495
1926.....	496,106	227,755	268,351	20,550	10,904
1927.....	538,001	253,508	284,493	19,755	11,662
1928.....	500,631	274,356	226,275	18,839	11,625
1929.....	479,327	252,498	226,829	18,127	12,908
1930.....	446,214	272,425	173,789	8,233	16,631
1931.....	280,679	290,916	-10,237	9,744	18,142
1932.....	174,871	287,657	-112,786	7,064	19,426
1933.....	150,728	243,802	-93,074	5,527	19,865
1934.....	163,904	177,172	-13,268	5,384	8,879
1935.....	179,721	189,050	-9,329	5,558	8,319
1936.....	190,899	193,284	-2,385	7,000	9,195
1937.....	231,884	224,582	7,302	8,076	8,829
1938.....	252,697	222,614	30,083	8,066	9,275
1939.....	268,331	201,409	66,922	6,498	8,202
1940.....	208,788	166,164	42,624	5,300	6,954
1941.....	151,784	88,477	63,307	2,929	4,407
1942.....	111,238	74,552	36,686	1,833	3,709
1943.....	104,842	58,722	46,120	1,495	4,207
1944.....	142,192	84,409	57,783	1,642	7,179
1945.....	202,366	93,362	109,004	2,341	11,270
1946.....	312,190	204,353	107,837	2,942	14,375
1947.....	513,597	323,422	190,175	4,771	18,663
1948.....	646,576	448,218	198,358	4,905	20,371
1949.....	635,589	430,089	205,500	4,834	20,040

* Immigrants and nonimmigrants.

† Emigrants and nonemigrants.

Estimated Population of the United States, 1940-49

Source: U. S. Bureau of the Census.

Date	Estimated population ¹	Increase since April 1, 1940	
		Number	%
April 1, 1940 (census)....	131,669,275	...	...
July 1, 1940.....	131,970,000	301,000	0.23
January 1, 1941.....	132,638,000	969,000	0.74
July 1, 1941.....	133,203,000	1,534,000	1.16
January 1, 1942.....	133,953,000	2,284,000	1.73
July 1, 1942.....	134,665,000	2,996,000	2.28
January 1, 1943.....	135,646,000	3,977,000	3.02
July 1, 1943.....	136,497,000	4,828,000	3.67
January 1, 1944.....	137,368,000	5,699,000	4.33
July 1, 1944.....	138,083,000	6,414,000	4.87
January 1, 1945.....	138,923,000	7,253,000	5.51
July 1, 1945.....	139,586,000	7,916,000	6.01
January 1, 1946.....	140,394,000	8,724,000	6.63
July 1, 1946.....	141,235,000	9,565,000	7.26
January 1, 1947.....	142,696,000	11,000,000	8.37
July 1, 1947.....	144,024,000	12,355,000	9.38
January 1, 1948.....	145,426,000	13,757,000	10.45
July 1, 1948.....	146,571,000	14,902,000	11.32
January 1, 1949.....	148,051,000	16,382,000	12.44
July 1, 1949.....	149,215,000	17,546,000	13.33
January 1, 1950.....	150,604,000	18,935,000	14.38
July 1, 1950.....	151,772,000	20,102,000	15.27

¹ Including armed forces overseas. NOTE: Estimates are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded. Derived figures are based on the unrounded absolute numbers. Figures not revised to take into account 1950 census.

U. S. Population by States, 1790 to 1950

Source: U. S. Bureau of the Census.

State	1790	1800	1810	1820	1830	1840
Alabama				127,901	309,527	590,756
Arkansas			1,062	14,273	30,388	97,574
Connecticut	237,946	251,002	261,942	275,248	297,675	309,978
Delaware	59,096	64,273	72,674	72,749	76,748	78,085
D. C.		14,093	24,023	33,039	39,834	43,712
Florida					34,730	54,477
Georgia	82,548	162,686	252,433	340,989	516,823	691,392
Illinois			12,282	55,211	157,445	476,183
Indiana		5,641	24,520	147,178	343,031	685,866
Iowa						43,112
Kentucky	73,677	220,955	406,511	564,317	687,917	779,828
Louisiana			76,556	153,407	215,739	352,411
Maine	96,540	151,719	228,705	298,335	399,455	501,793
Maryland	319,728	341,548	380,546	407,350	447,040	470,019
Massachusetts	378,787	422,845	472,040	523,287	610,408	737,699
Michigan			4,762	8,896	31,639	212,267
Mississippi		8,850	40,352	75,448	136,621	375,651
Missouri			19,783	66,586	140,455	383,702
New Hampshire	141,885	183,858	214,460	244,161	269,328	284,574
New Jersey	184,139	211,149	245,562	277,575	320,823	373,306
New York	340,120	589,051	959,049	1,372,812	1,918,608	2,428,921
North Carolina	393,751	478,103	555,500	638,829	737,987	753,419
Ohio		45,365	230,760	581,434	937,903	1,519,467
Pennsylvania	434,373	602,365	810,091	1,049,458	1,348,233	1,724,033
Rhode Island	68,825	69,122	76,931	83,059	97,199	108,830
South Carolina	249,073	345,591	415,115	502,741	581,185	594,398
Tennessee	35,691	105,602	261,727	422,823	681,904	829,210
Vermont	85,425	154,465	217,895	235,981	280,652	291,948
Virginia	747,610	880,200	974,600	1,065,366	1,211,405	1,239,797
Wisconsin						30,945
State	1850	1860	1870	1880	1890	1900
Alabama	771,623	964,201	996,992	1,262,505	1,513,401	1,828,697
Arizona			9,658	40,440	88,243	122,931
Arkansas	209,897	435,450	484,471	802,525	1,128,211	1,311,564
California	92,597	379,994	560,247	864,694	1,213,398	1,485,053
Colorado		34,277	39,864	194,327	413,249	539,700
Connecticut	370,792	460,147	537,454	622,700	746,258	908,420
Delaware	91,532	112,216	125,015	146,608	168,493	184,735
D. C.	51,687	75,080	131,700	177,624	230,392	278,718
Florida	87,445	140,424	187,748	269,493	391,422	528,542
Georgia	906,185	1,057,286	1,184,109	1,542,180	1,837,353	2,216,331
Idaho			14,999	32,610	88,548	161,772
Illinois	851,470	1,711,951	2,539,891	3,077,871	3,826,352	4,821,550
Indiana	988,416	1,350,428	1,680,637	1,978,301	2,192,404	2,516,462
Iowa	192,214	674,913	1,194,020	1,624,615	1,912,297	2,231,853
Kansas		107,206	364,399	996,096	1,428,108	1,470,495
Kentucky	982,405	1,155,684	1,321,011	1,648,690	1,858,635	2,147,174
Louisiana	517,762	708,002	726,915	939,946	1,118,588	1,381,625
Maine	583,169	628,279	626,915	648,936	661,086	694,466
Maryland	583,034	687,049	780,894	934,943	1,042,390	1,188,044
Massachusetts	994,514	1,231,066	1,457,351	1,783,085	2,238,947	2,805,346
Michigan	397,654	749,113	1,184,059	1,636,937	2,093,890	2,420,982
Minnesota	6,077	172,023	439,706	780,773	1,310,283	1,751,394
Mississippi	606,526	791,305	827,922	1,131,597	1,289,600	1,551,270
Missouri	682,044	1,182,012	1,721,295	2,168,380	2,679,185	3,106,665
Montana			20,595	39,159	142,924	243,329
Nebraska		28,841	122,993	452,402	1,062,656	1,066,300
Nevada		6,857	42,491	62,265	47,355	42,335
New Hampshire	317,976	326,073	318,300	346,991	376,530	411,588
New Jersey	489,555	672,035	906,096	1,131,116	1,444,933	1,883,669
New Mexico	61,547	93,516	91,874	119,565	160,282	195,310
New York	3,097,394	3,880,735	4,382,759	5,082,871	6,003,174	7,268,894
North Carolina	869,039	992,622	1,071,361	1,399,750	1,617,949	1,893,810
North Dakota*			2,405	36,909	190,983	319,146

State	1850	1860	1870	1880	1890	1900
Ohio.....	1,980,329	2,339,511	2,665,260	3,198,062	3,672,329	4,157,545
Oklahoma.....					258,657†	790,391†
Oregon.....	13,294	52,465	90,923	174,768	317,704	413,536
Pennsylvania.....	2,311,786	2,906,215	3,521,951	4,282,891	5,258,113	6,302,115
Rhode Island.....	147,545	174,620	217,353	276,531	345,506	428,556
South Carolina.....	668,507	703,708	705,606	995,577	1,151,149	1,340,316
South Dakota*		4,837	11,776	98,268	348,600	401,570
Tennessee.....	1,002,717	1,109,801	1,258,520	1,542,359	1,767,518	2,020,616
Texas.....	212,592	604,215	818,579	1,591,749	2,235,527	3,048,710
Utah.....	11,380	40,273	86,786	143,963	210,779	276,749
Vermont.....	314,120	315,098	330,551	332,286	332,422	343,641
Virginia.....	1,421,661	1,596,318	1,225,163	1,512,565	1,655,980	1,854,184
Washington.....		11,594	23,955	75,116	357,232	518,103
West Virginia.....			442,014	618,457	762,794	958,800
Wisconsin.....	305,391	775,881	1,054,670	1,315,497	1,693,330	2,069,042
Wyoming.....			9,118	20,789	62,555	92,531

State	1910	Rank	1920	Rank	1930	Rank	1940	Rank	1950	Rank
Alabama.....	2,138,093	18	2,348,174	18	2,646,248	15	2,832,961	17	3,061,743	17
Arizona.....	204,354	45	334,162	43	435,573	43	499,261	43	749,587	37
Arkansas.....	1,574,449	25	1,752,204	25	1,854,482	25	1,949,387	24	1,909,511	30
California.....	2,377,549	12	3,426,861	8	5,677,251	6	6,907,387	5	10,586,223	2
Colorado.....	799,024	32	939,629	33	1,035,791	33	1,123,296	33	1,325,089	34
Connecticut.....	1,114,756	31	1,380,631	29	1,606,903	29	1,709,242	31	2,007,280	28
Delaware.....	202,322	46	223,003	46	238,380	46	266,505	46	318,085	46
D. C.....	331,069		437,571		486,869		663,091		802,178	
Florida.....	752,619	33	968,470	32	1,468,211	31	1,897,414	27	2,771,305	20
Georgia.....	2,609,121	10	2,895,832	12	2,908,506	14	3,123,723	14	3,444,578	13
Idaho.....	325,594	44	431,866	42	445,032	42	524,873	42	588,637	43
Illinois.....	5,638,591	3	6,485,280	3	7,630,654	3	7,897,241	3	8,712,176	4
Indiana.....	2,700,876	9	2,930,390	11	3,238,503	11	3,427,796	12	3,934,224	12
Iowa.....	2,224,771	15	2,404,021	16	2,470,939	19	2,538,268	20	2,621,073	22
Kansas.....	1,690,949	22	1,769,257	24	1,880,999	24	1,801,028	29	1,905,299	31
Kentucky.....	2,289,905	14	2,416,630	15	2,614,589	17	2,845,627	16	2,944,806	19
Louisiana.....	1,656,388	24	1,798,509	22	2,101,593	22	2,363,880	21	2,683,516	21
Maine.....	742,371	34	768,014	35	797,423	35	847,226	35	913,774	35
Maryland.....	1,295,346	27	1,449,661	28	1,631,526	28	1,821,244	28	2,343,001	24
Massachusetts.....	3,366,416	6	3,852,356	5	4,249,614	8	4,316,721	8	4,690,514	9
Michigan.....	2,810,173	8	3,668,412	7	4,482,325	7	5,256,106	7	6,371,766	7
Minnesota.....	2,075,708	19	2,387,125	17	2,563,953	18	2,792,300	18	2,982,483	18
Mississippi.....	1,797,114	21	1,790,618	23	2,009,821	23	2,183,796	23	2,178,914	26
Missouri.....	3,293,335	7	3,404,055	9	3,629,367	10	3,784,664	10	3,954,653	11
Montana.....	376,053	40	548,889	39	537,606	39	559,456	39	591,024	42
Nebraska.....	1,192,214	29	1,296,372	31	1,377,963	32	1,315,834	32	1,325,510	33
Nevada.....	71,875	48	77,407	48	91,058	48	110,247	28	160,083	48
New Hampshire.....	430,572	39	443,083	41	465,293	41	491,524	44	533,242	44
New Jersey.....	2,537,167	11	3,155,900	10	4,041,334	9	4,160,165	9	4,835,329	8
New Mexico.....	327,301	43	360,350	43	423,317	44	531,818	41	681,187	39
New York.....	9,113,614	1	10,385,227	1	12,588,066	1	13,479,142	1	14,830,192	1
North Carolina.....	2,206,287	16	2,559,123	14	3,170,276	12	3,571,623	11	4,061,929	10
North Dakota.....	577,056	37	646,872	36	680,845	38	641,935	38	619,636	41
Ohio.....	4,767,121	4	5,759,394	4	6,646,697	4	6,907,612	4	7,946,627	5
Oklahoma.....	1,657,155	23	2,028,283	21	2,396,040	21	2,336,434	22	2,233,351	25
Oregon.....	672,765	35	783,389	34	953,786	34	1,089,684	34	1,521,341	32
Pennsylvania.....	7,665,111	2	8,720,017	2	9,631,350	2	9,900,180	2	10,498,012	3
Rhode Island.....	542,610	38	604,397	38	687,497	37	713,346	36	791,896	36
South Carolina.....	1,515,400	26	1,683,724	26	1,738,765	26	1,899,804	26	2,117,027	27
South Dakota.....	583,888	36	636,547	37	692,849	36	642,961	37	652,740	40
Tennessee.....	2,184,789	17	2,337,885	19	2,616,556	16	2,915,841	15	3,291,718	16
Texas.....	3,896,542	5	4,663,228	5	5,824,715	5	6,414,824	6	7,711,194	6
Utah.....	373,351	41	449,396	40	507,847	40	550,310	40	688,862	38
Vermont.....	355,956	42	352,428	44	359,611	45	359,231	45	377,747	45
Virginia.....	2,061,612	20	2,309,187	20	2,421,851	20	2,677,773	19	3,318,680	15
Washington.....	1,141,990	30	1,356,621	30	1,563,396	30	1,736,191	30	2,378,963	23
West Virginia.....	1,221,119	28	1,463,701	27	1,729,205	27	1,901,974	25	2,005,552	29
Wisconsin.....	2,333,860	13	2,632,067	13	2,939,006	13	3,137,518	13	3,434,575	14
Wyoming.....	145,965	47	194,402	47	225,565	47	250,742	47	290,529	47

* 1860 figure under South Dakota is for Dakota Territory; 1870 and 1880 figures under North and South Dakota are for parts of Territory which later constituted respective states. † Includes population of Indian Territory: 1890, 180,182; 1900, 392,060.

Population and Area of Major U. S. Cities

(over 50,000 population in 1950)

Source: U. S. Bureau of the Census.

City	1910 population	1920 population	1930 population	1940 population	1950 population*	1950 rank*	Area, sq. mi.†
Akron, Ohio	69,067	208,435	255,040	244,791	273,189	39	54.1
Alameda, Calif.	23,383	28,806	35,033	36,256	63,425	187	29.0
Albany, N. Y.	100,253	113,344	127,412	130,577	134,382	68	19.6
Albuquerque, N. Mex.	11,020	15,157	26,570	35,449	97,012	111	11.0
Alexandria, Va.	15,329	18,060	24,149	33,523	61,604	193	7.6
Alhambra, Calif.	5,021	9,096	29,472	38,935	51,284	224	6.4
Allentown, Pa.	51,913	73,502	92,563	96,904	106,233	98	16.1
Altoona, Pa.	52,127	60,331	82,054	80,214	76,844	147	9.0
Amarillo, Tex.	9,957	15,494	43,132	51,686	73,737	151	16.4
Asheville, N. C.	18,762	28,504	50,193	51,310	52,208	219	14.7
Atlanta, Ga.	154,839	200,616	270,366	302,288	327,090	32	34.7
Atlantic City, N. J.	46,150	50,707	66,198	64,094	61,642	192	16.4
Augusta, Ga.	41,040	52,548	60,342	65,919	71,507	163	9.8
Aurora, Ill.	29,807	36,397	46,589	47,170	50,508	231	8.3
Austin, Tex.	29,860	34,876	53,120	87,930	131,964	72	26.3
Baltimore, Md.	558,485	733,826	804,874	859,100	940,205	6	85.6
Baton Rouge, La.	14,897	21,782	30,729	34,719	123,957	84	4.0
Bay City, Mich.	45,166	47,554	47,355	47,956	52,372	218	11.1
Bayonne, N. J.	55,545	76,754	88,979	79,198	76,657	148	11.4
Beaumont, Tex.	20,640	40,422	57,732	59,061	93,715	118	10.5
Berkeley, Calif.	40,434	56,036	82,109	85,547	113,217	89	17.2
Berwyn, Ill.	5,841	14,150	47,027	48,451	51,176	226	3.8
Bethlehem, Pa.	12,837	50,358	57,892	58,490	66,027	177	17.8
Binghamton, N. Y.	48,443	66,800	76,662	78,309	81,132	137	10.6
Birmingham, Ala.	132,685	178,806	259,678	267,583	298,720	37	50.3
Boston, Mass.	670,585	748,060	781,188	770,816	790,863	10	65.9
Bridgeport, Conn.	102,054	143,555	146,716	147,121	159,352	63	17.9
Brockton, Mass.	56,878	66,254	63,797	62,343	62,856	189	21.5
Brookline, Mass.	27,792	37,748	47,490	49,786	56,952	206	6.8
Buffalo, N. Y.	423,715	506,775	573,076	575,901	577,393	15	50.2
Burbank, Calif.		2,913	16,662	34,337	78,318	142	16.3
Cambridge, Mass.	104,839	109,694	113,643	110,879	120,676	85	7.0
Camden, N. J.	94,538	116,309	118,700	117,536	124,543	81	9.8
Canton, Ohio	50,217	87,091	104,906	108,401	116,312	87	14.0
Cedar Rapids, Iowa	32,811	45,566	56,097	62,120	72,149	159	28.4
Charleston, S. C.	58,833	67,957	62,265	71,275	68,243	170	5.9
Charleston, W. Va.	22,996	39,608	60,408	67,914	72,818	158	8.5
Charlotte, N. C.	34,014	46,338	82,675	100,899	133,219	69	19.3
Chattanooga, Tenn.	44,604	57,895	119,798	128,163	130,333	73	27.9
Chester, Pa.	38,537	58,030	59,164	59,285	65,824	179	6.1
Chicago, Ill.	2,185,283	2,701,705	3,376,438	3,396,808	3,606,436	2	211.3
Cicero, Ill.	14,557	44,995	66,602	64,712	67,195	174	5.8
Cincinnati, Ohio	363,591	401,247	451,160	455,610	500,510	18	72.4
Cleveland, Ohio	560,663	796,841	900,429	878,336	905,636	7	73.1
Cleveland Heights, Ohio	2,955	15,236	50,945	54,992	58,782	198	8.2
Clifton, N. J.		26,470	46,875	48,827	64,567	181	11.9
Columbia, S. C.	26,319	37,524	51,581	62,396	85,949	130	9.0
Columbus, Ga.	20,554	31,125	43,131	53,280	79,510	141	6.8
Columbus, Ohio	181,511	237,031	290,564	306,087	374,770	28	39.5
Corpus Christi, Tex.	8,222	10,522	27,741	57,301	108,053	97	13.9
Covington, Ky.	53,270	57,121	65,252	62,018	64,282	183	6.5
Cranston, R. I.	21,107	29,407	42,911	47,085	55,130	210	30.0
Dallas, Tex.	92,104	158,976	260,475	294,734	432,927	22	41.8
Davenport, Iowa	43,028	56,727	60,751	66,039	73,640	154	19.8
Dayton, Ohio	116,577	152,559	200,982	210,718	243,108	44	23.7
Dearborn, Mich.	911	2,470	50,358	63,584	94,529	117	25.1
Decatur, Colo.	31,140	43,818	57,510	59,305	67,801	172	9.5
Denver, Colo.	213,381	256,491	287,861	322,412	412,856	24	58.7
Des Moines, Iowa	86,368	126,468	142,559	159,819	176,954	54	53.8
Detroit, Mich.	465,766	993,678	1,568,662	1,623,452	1,838,517	5	142.0
Duluth, Minn.	78,466	98,917	101,463	101,065	104,066	103	70.9
Durham, N. C.	18,241	21,719	52,037	60,195	70,307	168	13.3
East Chicago, Ind.	19,098	35,967	54,784	54,637	54,124	214	10.7
East Orange, N. J.	34,371	50,710	68,020	68,945	78,057	143	3.9

City	1910 population	1920 population	1930 population	1940 population	1950 population*	1950 rank*	Area, sq. mi.†
East St. Louis, Ill.	58,547	66,767	74,347	75,609	81,950	135	13.9
Elizabeth, N. J.	73,409	95,783	114,589	109,912	112,675	90	13.3
El Paso, Tex.	39,279	77,560	102,421	96,810	130,003	75	13.7
Erie, Pa.	66,525	93,372	115,967	116,955	130,125	74	18.0
Evanston, Ill.	24,978	37,234	63,338	65,389	73,030	157	8.2
Evansville, Ind.	69,647	85,264	102,249	97,062	109,869	94	9.7
Fall River, Mass.	119,295	120,485	115,274	115,428	111,759	91	40.8
Flint, Mich.	38,550	91,599	156,492	151,543	162,800	60	29.4
Fort Wayne, Ind.	63,933	86,549	114,946	118,410	132,840	70	17.1
Fort Worth, Tex.	73,312	106,482	163,447	177,662	277,047	38	58.1
Fresno, Calif.	24,892	45,086	52,513	60,685	90,618	125	9.9
Gadsden, Ala.	10,557	14,737	24,042	36,975	55,528	208	12.7
Galveston, Tex.	36,981	44,255	52,938	60,862	65,898	178	34.8
Gary, Ind.	16,802	55,378	100,426	111,719	132,496	71	40.6
Glendale, Calif.	2,746	13,536	62,736	82,582	95,398	115	20.0
Grand Rapids, Mich.	112,571	137,634	168,592	164,292	175,647	55	23.0
Green Bay, Wis.	25,236	31,017	37,415	46,235	52,443	217	14.8
Greensboro, N. C.	15,895	19,861	53,569	59,319	73,703	152	18.0
Greenville, S. C.	15,741	23,127	29,154	34,734	57,932	201	5.0
Hamilton, Ohio	35,279	39,675	52,176	50,592	57,717	203	6.6
Hammond, Ind.	20,925	36,004	64,560	70,184	87,423	127	24.4
Harrisburg, Pa.	64,186	75,917	80,339	83,893	89,091	126	9.8
Hartford, Conn.	98,915	138,036	164,072	166,267	177,073	53	18.6
Hoboken, N. J.	70,324	68,166	59,261	50,115	50,510	230	1.6
Holyoke, Mass.	57,730	60,203	56,537	53,750	54,441	212	22.8
Houston, Tex.	78,800	138,276	292,352	384,514	594,321	14	72.8
Huntington, W. Va.	31,161	50,177	75,572	78,836	86,160	129	14.8
Indianapolis, Ind.	233,650	314,194	364,161	386,972	424,683	23	53.7
Irrington, N. J.	11,877	25,480	56,733	55,328	59,142	197	3.1
Jackson, Mich.	31,433	48,374	55,187	49,656	50,904	227	10.2
Jackson, Miss.	21,262	22,817	48,282	62,107	97,674	109	16.1
Jacksonville, Fla.	57,699	91,558	129,549	173,065	198,880	49	39.4
Jersey City, N. J.	267,779	298,103	316,715	301,173	300,447	36	21.5
Johnstown, Pa.	55,482	67,327	66,993	66,668	62,723	191	5.6
Joliet, Ill.	34,670	38,442	42,993	42,365	52,460	216	6.0
Kalamazoo, Mich.	39,437	48,487	54,786	54,097	57,326	205	8.5
Kansas City, Kans.	82,331	101,177	121,857	121,458	129,583	76	20.4
Kansas City, Mo.	248,381	324,410	399,746	399,178	453,290	20	59.4
Kenosha, Wis.	21,371	40,472	50,262	48,765	54,360	213	7.7
Knoxville, Tenn.	36,346	77,818	105,802	111,580	124,183	82	25.4
Lakewood, Ohio	15,181	41,732	70,509	69,160	67,878	171	5.6
Lancaster, Pa.	47,227	53,150	59,949	61,345	63,601	185	3.9
Lansing, Mich.	31,229	57,327	78,397	78,753	91,694	122	11.6
Laredo, Tex.	14,855	22,710	32,618	39,274	51,694	223	14.4
Lawrence, Mass.	85,892	94,270	85,068	84,323	80,427	140	7.2
Lexington, Ky.	35,099	41,534	45,736	49,304	54,449	211	5.4
Lincoln, Nebr.	43,973	54,948	75,933	81,984	97,423	110	24.3
Little Rock, Ark.	45,941	65,142	81,679	88,039	101,387	106	17.9
Long Beach, Calif.	17,809	55,593	142,032	164,271	244,072	43	32.6
Lorain, Ohio	28,883	37,295	44,512	44,125	50,819	228	10.5
Los Angeles, Calif.	319,198	576,673	1,238,048	1,504,277	1,957,692	4	452.2
Louisville, Ky.	223,928	234,891	307,745	319,077	367,359	30	40.8
Lowell, Mass.	106,294	112,759	100,234	101,389	96,523	112	14.1
Lubbock, Tex.	1,938	4,051	20,520	31,853	71,390	164	6.3
Lynn, Mass.	89,336	99,148	102,320	98,123	99,521	107	10.9
McKeesport, Pa.	42,694	46,781	54,632	55,355	51,223	225	5.2
Macon, Ga.	40,665	52,995	53,829	57,865	70,106	169	8.1
Madison, Wis.	25,531	38,378	57,899	67,447	95,594	114	8.1
Malden, Mass.	44,404	49,103	58,036	58,010	59,779	194	4.8
Manchester, N. H.	70,063	78,384	76,834	77,685	82,581	134	33.9
Medford, Mass.	23,150	39,038	59,714	63,083	66,109	176	8.6
Memphis, Tenn.	131,105	162,351	253,143	292,942	394,012	26	48.5
Miami, Fla.	5,471	29,571	110,637	172,172	246,983	42	38.1
Milwaukee, Wis.	373,857	457,147	578,249	587,472	632,651	13	43.4
Minneapolis, Minn.	301,408	380,582	464,356	492,370	517,277	17	58.8
Mobile, Ala.	51,521	60,777	68,202	78,720	127,151	78	13.5
Montgomery, Ala.	38,136	43,464	66,079	78,084	105,098	100	20.3
Mount Vernon, N. Y.	30,919	42,726	61,499	67,362	71,837	160	4.2
Muncie, Ind.	24,005	36,524	46,548	49,720	58,364	200	9.3
Nashville, Tenn.	110,364	118,342	153,866	167,402	173,359	56	22.0

City	1910 population	1920 population	1930 population	1940 population	1950 population*	1950 rank*	Area, sq. mi.†
New Bedford, Mass.....	96,652	121,217	112,597	110,341	109,033	96	19.4
New Britain, Conn.....	43,916	59,316	68,128	68,685	73,663	153	13.8
New Haven, Conn.....	133,605	162,537	162,655	160,605	163,344	59	22.5
New Orleans, La.....	339,075	387,219	458,762	494,537	567,257	16	363.5
New Rochelle, N. Y.....	28,867	36,213	54,000	58,408	59,626	196	10.0
New York, N. Y.....	4,766,883	5,620,048	6,930,446	7,454,995	7,835,099	1	365.4
Bronx.....	430,980	732,016	1,265,258	1,394,711	1,444,903	...	54.4
Brooklyn.....	1,634,351	2,018,356	2,560,401	2,698,285	2,716,347	...	88.8
Manhattan.....	2,331,542	2,284,103	1,867,312	1,889,924	1,936,540	...	31.2
Queens.....	284,041	469,042	1,079,129	1,297,634	1,546,294	...	126.6
Richmond.....	85,969	116,531	158,346	174,441	191,015	...	64.4
Newark, N. J.....	347,469	414,524	442,337	429,760	437,857	21	26.8
Newton, Mass.....	39,806	46,054	65,276	69,873	80,996	138	17.5
Niagara Falls, N. Y.....	30,445	50,760	75,460	78,029	90,875	124	15.9
Norfolk, Va.....	67,452	115,777	129,710	144,332	188,601	50	35.9
Oak Park, Ill.....	19,444	39,858	63,982	66,015	63,175	188	4.7
Oakland, Calif.....	150,174	216,261	284,063	302,163	380,576	27	60.3
Ogden, Utah.....	25,580	32,804	40,272	43,688	56,910	207	16.7
Oklahoma City, Okla.....	64,205	91,295	185,389	204,424	242,450	45	49.8
Omaha, Nebr.....	124,096	191,601	214,006	223,844	247,408	41	39.3
Orlando, Fla.....	3,894	9,282	27,330	36,736	51,826	222	11.6
Pasadena, Calif.....	30,291	45,354	76,086	81,864	104,087	102	19.4
Passaic, N. J.....	54,773	63,841	62,959	61,394	57,851	202	3.2
Paterson, N. J.....	125,600	135,875	138,513	139,656	139,423	66	8.4
Pawtucket, R. I.....	51,622	64,248	77,149	75,797	81,180	73	9.0
Peoria, Ill.....	66,950	76,121	104,969	105,087	111,523	92	13.7
Philadelphia, Pa.....	1,549,008	1,823,779	1,950,961	1,931,334	2,064,794	3	135.0
Phoenix, Ariz.....	11,134	29,053	48,118	55,414	105,442	99	9.7
Pittsburgh, Pa.....	533,905	588,343	669,817	671,659	673,763	12	55.1
Pittsfield, Mass.....	32,121	41,763	49,677	49,684	53,055	215	42.4
Pontiac, Mich.....	14,532	34,273	64,928	66,626	73,112	156	20.0
Port Arthur, Tex.....	7,663	22,251	50,902	46,140	57,377	204	27.3
Portland, Maine.....	58,571	69,272	70,810	73,643	76,936	146	37.8
Portland, Oreg.....	207,214	258,288	301,815	305,394	371,011	29	66.9
Portsmouth, Va.....	33,190	54,387	45,704	50,745	71,294	166	6.9
Providence, R. I.....	224,326	237,595	252,981	253,504	247,700	40	19.9
Pueblo, Colo.....	41,747	43,050	50,096	52,162	63,561	186	10.2
Quincy, Mass.....	32,642	47,876	71,983	75,810	83,190	133	26.4
Racine, Wis.....	38,002	58,593	67,542	67,195	70,749	167	8.7
Raleigh, N. C.....	19,218	24,418	37,379	46,897	65,123	180	7.5
Reading, Pa.....	96,071	107,784	111,171	110,568	109,062	95	8.8
Richmond, Calif.....	6,802	16,843	20,093	23,642	29,218	108	25.5
Richmond, Va.....	127,628	171,667	182,929	193,042	229,906	46	23.0
Roanoke, Va.....	34,874	50,842	69,206	69,287	91,089	123	10.8
Rochester, N. Y.....	218,149	295,750	328,132	324,975	331,252	31	35.3
Rockford, Ill.....	45,401	65,651	85,864	84,637	92,503	119	12.4
Sacramento, Calif.....	44,696	65,908	93,750	105,958	135,761	67	13.7
Saginaw, Mich.....	50,510	61,903	80,715	82,794	92,352	120	17.0
St. Joseph, Mo.....	77,403	77,939	80,935	75,711	75,572	150	14.1
St. Louis, Mo.....	687,029	772,897	821,960	816,048	852,623	8	65.0
St. Paul, Minn.....	214,744	234,698	271,606	287,736	309,474	34	54.9
St. Petersburg, Fla.....	4,127	14,237	40,425	60,812	95,712	113	58.1
Salt Lake City, Utah.....	92,777	118,110	140,267	149,934	181,718	51	52.5
San Angelo, Tex.....	10,321	10,050	25,308	25,802	51,889	221	7.2
San Antonio, Tex.....	96,614	161,379	231,542	253,854	406,811	25	35.8
San Bernardino, Calif.....	12,779	18,721	37,481	43,646	62,792	190	18.4
San Diego, Calif.....	39,578	74,361	147,995	203,341	321,485	33	105.8
San Francisco, Calif.....	416,912	506,676	634,394	634,536	760,753	11	93.1
San Jose, Calif.....	28,946	39,642	57,651	68,457	95,044	116	14.8
Santa Monica, Calif.....	7,847	15,252	37,146	53,500	71,299	165	8.0
Savannah, Ga.....	65,064	83,252	85,024	95,996	119,689	86	11.5
Schenectady, N. Y.....	72,826	88,723	95,692	92,070	92,070	121	10.4
Scranton, Pa.....	129,867	137,783	143,433	140,404	124,747	80	19.5
Seattle, Wash.....	237,194	315,312	365,583	368,302	462,440	19	80.7
Shreveport, La.....	28,015	43,874	76,655	98,167	125,506	79	19.2
Sloux City, Iowa.....	47,828	71,227	79,183	82,364	84,035	132	46.2
Sloux Falls, S. Dak.....	14,094	25,202	33,362	40,832	52,161	220	10.8
Somerville, Mass.....	77,236	93,071	103,908	102,177	102,254	104	4.2
South Bend, Ind.....	53,684	70,983	104,193	101,268	115,698	88	19.7
South Gate, Calif.....	.....	.....	19,632	26,945	50,684	229	7.5

City	1910 population	1920 population	1930 population	1940 population	1950 population*	1950 rank*	Area, sq. mi.†
Spokane, Wash.	104,402	104,437	115,514	122,001	160,484	62	41.5
Springfield, Ill.	51,678	59,183	71,864	75,503	80,832	139	9.5
Springfield, Mass.	88,926	129,614	149,900	149,554	162,601	61	33.1
Springfield, Mo.	35,201	39,631	57,527	61,238	66,302	175	13.6
Springfield, Ohio	46,921	60,840	68,743	70,662	78,029	144	11.8
Stamford, Conn.	25,138	35,096	46,346	47,938	73,584	155	7.0
Stockton, Calif.	23,253	40,296	47,963	54,714	71,660	161	9.9
Syracuse, N. Y.	137,249	171,717	209,326	205,967	220,067	47	25.7
Tacoma, Wash.	83,743	96,965	106,817	109,408	142,975	65	49.1
Tampa, Fla.	37,782	51,608	101,161	108,391	124,073	83	22.7
Terre Haute, Ind.	58,157	66,083	62,810	62,693	64,047	184	9.8
Toledo, Ohio	168,497	243,164	290,718	282,349	301,358	35	41.3
Topeka, Kans.	43,684	50,022	64,120	67,833	77,827	145	11.7
Trenton, N. J.	96,815	119,289	123,356	124,697	127,867	77	7.7
Troy, N. Y.	76,813	71,996	72,763	70,304	71,659	162	10.0
Tulsa, Okla.	18,182	72,075	141,258	142,157	180,586	52	22.0
Union City, N. J.	21,023	20,651	58,659	56,173	55,322	209	1.3
Utica, N. Y.	74,419	94,156	101,740	100,518	101,479	105	15.8
Waco, Tex.	26,425	38,500	52,848	55,982	84,300	131	15.5
Washington, D. C.	331,069	437,571	486,869	663,091	802,178†	9	69.2
Waterbury, Conn.	73,141	91,715	99,902	99,314	104,242	101	28.2
Waterloo, Iowa	26,693	36,230	46,191	51,743	64,354	182	13.6
Wheeling, W. Va.	41,641	56,208	61,659	61,099	58,447	199	11.1
Wichita, Kans.	52,450	72,217	111,110	114,966	166,306	58	21.6
Wichita Falls, Tex.	8,200	40,079	43,690	45,112	67,709	173	10.8
Wilkes-Barre, Pa.	67,105	73,833	86,626	86,236	76,638	149	7.2
Wilmington, Del.	87,411	110,168	106,597	112,504	109,907	93	17.3
Winston-Salem, N. C.	22,700	48,395	75,274	79,815	86,816	128	15.1
Woonsocket, R. I.	38,125	49,496	49,376	49,303	50,186	232	8.8
Worcester, Mass.	145,986	179,754	195,311	193,694	201,885	48	38.3
Yonkers, N. Y.	79,803	100,176	134,646	142,598	152,533	64	20.3
York, Pa.	44,750	47,512	55,254	56,712	59,704	195	4.1
Youngstown, Ohio	79,066	132,358	170,002	167,720	167,643	57	33.1

* Preliminary figures, subject to revision. † Total land and water area in 1940. ‡ Final figure. NOTE: Increase from census to census includes that due to annexation of territory as well as to direct growth.

Density of U. S. Population by State

Source: U. S. Bureau of the Census.

State	Land area, sq. mi.	Population per sq. mi.			State	Land area, sq. mi.	Population per sq. mi.		
		1900	1920	1940			1900	1920	1940
District of Columbia	61	4,645.3	7,292.9	10,870.3	Mississippi	47,420	33.5	38.6	46.1
Rhode Island	1,058	401.6	566.4	674.2	Iowa	55,986	40.2	43.2	45.5
New Jersey	7,522	250.7	420.0	553.1	California	156,803	9.5	22.0	44.1
Massachusetts	7,907	349.0	479.2	545.9	Vermont	9,278	37.7	38.6	38.7
Connecticut	4,899	188.5	286.4	348.9	Arkansas	52,725	25.0	33.4	37.0
New York	47,929	152.5	217.9	281.2	Florida	54,262	9.6	17.7	35.0
Pennsylvania	45,045	140.6	194.5	219.8	Minnesota	80,009	21.7	29.5	34.9
Maryland	9,887	119.5	145.8	184.2	Oklahoma	69,283	11.4*	29.2	33.7
Ohio	41,122	102.1	141.4	168.0	Maine	31,040	23.2	25.7	27.3
Illinois	55,947	86.1	115.7	141.2	Washington	66,977	7.8	20.3	25.9
Delaware	1,978	94.0	113.5	134.7	Texas	263,644	11.6	17.8	24.3
Indiana	36,205	70.1	81.3	94.7	Kansas	82,113	18.0	21.6	21.9
Michigan	57,022	42.1	63.8	92.2	Nebraska	76,653	13.9	16.9	17.2
West Virginia	24,090	39.9	60.9	79.0	Oregon	96,350	4.3	8.2	11.3
North Carolina	49,142	38.9	52.5	72.7	Colorado	103,967	5.2	9.1	10.8
Kentucky	40,109	53.4	60.1	70.9	North Dakota	70,054	4.5	9.2	9.2
Tennessee	41,961	48.5	56.1	69.5	South Dakota	76,536	5.2	8.3	8.4
Virginia	39,899	46.1	57.4	67.1	Utah	82,346	3.4	5.5	6.7
South Carolina	30,594	44.0	55.2	62.1	Idaho	82,808	1.9	5.2	6.3
Wisconsin	54,715	37.4	47.6	57.3	New Mexico	121,511	1.6	2.9	4.4
Alabama	51,078	35.7	45.8	55.5	Arizona	113,580	1.1	2.9	4.4
Missouri	69,270	45.2	49.5	54.6	Montana	146,316	1.7	3.8	3.8
New Hampshire	9,024	45.6	49.1	54.5	Wyoming	97,506	.9	2.0	2.6
Georgia	58,518	37.7	49.3	53.4	Nevada	109,802	.4	.7	1.0
Louisiana	45,177	30.4	39.6	52.3					

* Includes Indian Territory.

Population by Race, 1940

Source: U. S. Bureau of the Census.

State	Native white	Foreign-born white	Negro	Indian	Chinese	Japanese
Alabama.....	1,837,140	11,957	983,290	464	41	21
Arizona.....	389,955	36,837	14,993	55,076	1,449	632
Arkansas.....	1,458,392	7,692	482,578	278	432	3
California.....	5,725,870	870,893	124,306	18,675	39,556	93,717
Colorado.....	1,036,031	70,471	12,176	1,360	216	2,734
Connecticut.....	1,347,466	327,941	32,992	201	292	164
Delaware.....	215,695	14,833	35,876	14	39	22
D. C.....	440,312	34,014	187,266	190	656	68
Florida.....	1,312,125	69,861	514,198	690	214	154
Georgia.....	2,026,362	11,916	1,084,927	106	326	31
Idaho.....	495,176	24,116	595	3,537	208	1,191
Illinois.....	6,534,829	969,373	387,446	624	2,456	462
Indiana.....	3,194,692	110,631	121,916	223	208	29
Iowa.....	2,403,446	117,245	16,694	733	81	29
Kansas.....	1,683,084	51,412	65,138	1,165	133	19
Kentucky.....	2,615,794	15,631	214,031	44	100	9
Louisiana.....	1,484,467	27,272	849,303	1,801	360	46
Maine.....	760,902	83,641	1,304	1,251	92	5
Maryland.....	1,436,766	81,715	301,931	73	437	36
Massachusetts.....	3,408,744	848,852	55,391	769	2,513	158
Michigan.....	4,356,613	683,080	208,345	6,282	924	139
Minnesota.....	2,474,078	294,904	9,928	12,528	551	51
Mississippi.....	1,100,339	5,988	1,074,578	2,134	743	1
Missouri.....	3,425,062	114,125	244,386	330	334	74
Montana.....	484,826	55,642	1,120	16,841	258	508
Nebraska.....	1,215,771	81,853	14,171	3,401	102	480
Nevada.....	93,431	10,599	664	4,747	286	470
New Hampshire.....	422,693	68,296	414	50	63	4
New Jersey.....	3,235,277	695,810	226,973	211	1,200	298
New Mexico.....	477,065	15,247	4,672	34,510	106	186
New York.....	10,026,016	2,853,530	571,221	8,651	13,731	2,538
North Carolina.....	2,558,589	9,046	981,298	22,546	83	21
North Dakota.....	557,192	74,272	201	10,114	56	83
Ohio.....	6,047,265	519,266	339,461	338	921	163
Oklahoma.....	2,083,869	20,359	168,849	63,125	112	57
Oregon.....	988,092	87,639	2,565	4,594	2,086	4,071
Pennsylvania.....	8,453,729	973,260	470,172	441	1,477	224
Rhode Island.....	564,021	137,784	11,024	196	257	6
South Carolina.....	1,079,393	4,915	814,164	1,234	27	33
South Dakota.....	575,023	44,052	474	23,347	36	19
Tennessee.....	2,395,586	11,320	508,736	114	60	12
Texas.....	5,253,157	234,388	924,391	1,103	1,031	458
Utah.....	510,622	32,298	1,235	3,611	228	2,210
Vermont.....	327,079	31,727	384	16	21	3
Virginia.....	1,992,596	22,987	661,449	198	208	74
Washington.....	1,494,984	203,163	7,424	11,394	2,345	14,565
West Virginia.....	1,742,320	41,782	117,754	25	57	3
Wisconsin.....	2,823,978	288,774	12,158	12,265	290	23
Wyoming.....	229,818	16,779	956	2,349	102	643
Totals.....	106,795,732	11,419,138	12,865,518	333,969	77,504	126,947

Cases of Single and Plural Births, U. S., 1948

Source: Federal Security Agency, Public Health Service.

Cases of births	Under 15		Age of mother				50 & over		Not stated	Total cases
	15-19	20-24	25-29	30-34	35-39	40-44	45-49			
Single births.....	4,848	427,064	1,140,978	959,404	564,875	280,498	73,006	4,972	156	7,519
Twins.....	19	2,482	9,569	10,841	7,857	4,504	891	41	3	39
Triplets.....	...	16	69	99	90	52	10	...	...	...
Quadruplets.....	...	...	...	2	1	...	...	...	...	...
Quintuplets.....	...	...	...	...	1	...	...	...	...	...
Total cases.....	4,867	429,562	1,150,616	970,346	572,824	285,054	73,907	5,013	159	7,558

¹ Excludes 478 cases in which report for only 1 mate was received. ² Excludes 17 cases in which reports for only 1 or 2 mates were received. NOTE: "Cases" refer to confinements resulting in either a single or plural issue. Only those cases in which at least one child was born alive are included.

Population for Urban and Rural Groups, 1930 and 1940

Source: U. S. Bureau of the Census.

The urban area is made up for the most part of cities and other incorporated places having 2,500 inhabitants or more. In addition, it includes unincorporated political subdivisions with a population of 10,000 or more and a population density of 1,000 or more per square mile, and in the states of Massachusetts, Rhode Island, and New Hampshire those towns (townships) which contain a village of 2,500 or more, comprising either by itself or when combined with other villages within the same town, more than fifty per cent of the total population of the town.

The remainder of the population is classified as rural and is subdivided into the rural-farm population, which comprises all rural residents living on farms, without regard to occupation, and the rural-nonfarm population, which comprises the remaining rural population.

Type of place by population	1930			1940		
	Number of places	Population	Per cent	Number of places	Population	Per cent
Urban territory.....	3,165	68,954,823	56.2	3,464	74,423,702	56.5
1,000,000 or more.....	5	15,064,555	12.3	5	15,910,866	12.1
500,000—1,000,000.....	8	5,763,987	4.7	9	6,456,959	4.9
250,000—500,000.....	24	7,956,228	6.5	23	7,827,514	5.9
100,000—250,000.....	56	7,540,966	6.1	55	7,792,650	5.9
50,000—100,000.....	98	6,491,448	5.3	107	7,343,917	5.6
25,000—50,000.....	185	6,425,693	5.2	213	7,417,093	5.6
10,000—25,000.....	606	9,097,200	7.4	665	9,966,898	7.6
5,000—10,000.....	851	5,897,156	4.8	965	6,681,894	5.1
2,500—5,000.....	1,332	4,717,590	3.8	1,422	5,025,911	3.8
Rural territory.....		53,820,223	43.8		57,245,573	43.5
1,000—2,500 (Incorporated).....	3,087	4,820,707	3.9	3,205	5,026,834	3.8
Under 1,000 (Incorporated).....	10,346	4,362,746	3.6	10,083	4,315,843	3.3
Unincorporated territory.....		44,636,770	36.4		47,902,896	36.4
Total United States.....		122,775,046	100.0		131,669,275	100.0

U. S. Population by Sex, 1940

Source: U. S. Bureau of the Census.

State	Males	Females	Males per 100 females	State	Males	Females	Males per 100 females
Alabama.....	1,399,901	1,433,060	97.7	Nebraska.....	665,788	650,046	102.4
Arizona.....	258,170	241,091	107.1	Nevada.....	61,341	48,906	125.4
Arkansas.....	982,916	966,471	101.7	New Hampshire.....	244,909	246,615	99.3
California.....	3,515,730	3,391,657	103.7	New Jersey.....	2,069,159	2,091,006	99.0
Colorado.....	568,778	554,518	102.6	New Mexico.....	271,846	259,972	104.6
Connecticut.....	849,923	859,319	98.9	New York.....	6,690,326	6,788,816	98.5
Delaware.....	134,333	132,172	101.6	North Carolina.....	1,772,990	1,798,633	98.6
D. C.....	317,522	345,569	91.9	North Dakota.....	335,402	306,533	109.4
Florida.....	943,123	954,291	98.8	Ohio.....	3,461,072	3,446,540	100.4
Georgia.....	1,534,758	1,588,965	96.6	Oklahoma.....	1,181,892	1,154,542	102.4
Idaho.....	276,579	248,294	111.4	Oregon.....	562,689	526,995	106.8
Illinois.....	3,957,149	3,940,092	100.4	Pennsylvania.....	4,951,207	4,948,973	100.0
Indiana.....	1,725,201	1,702,595	101.3	Rhode Island.....	349,404	363,942	96.0
Iowa.....	1,280,494	1,257,774	101.8	South Carolina.....	935,239	964,565	97.0
Kansas.....	906,340	894,688	101.3	South Dakota.....	332,514	310,447	107.1
Kentucky.....	1,435,812	1,409,815	101.8	Tennessee.....	1,445,829	1,470,012	98.4
Louisiana.....	1,172,382	1,191,498	98.4	Texas.....	3,221,103	3,193,721	100.9
Maine.....	425,821	421,405	101.0	Utah.....	278,620	271,690	102.6
Maryland.....	915,038	906,206	101.0	Vermont.....	182,224	177,007	102.9
Massachusetts.....	2,102,479	2,214,242	95.0	Virginia.....	1,349,004	1,328,769	101.5
Michigan.....	2,694,727	2,561,379	105.2	Washington.....	905,757	830,434	109.1
Minnesota.....	1,427,545	1,364,755	104.6	West Virginia.....	968,582	933,392	103.8
Mississippi.....	1,084,482	1,099,314	98.7	Wisconsin.....	1,600,176	1,537,411	104.1
Missouri.....	1,881,252	1,903,412	98.8	Wyoming.....	135,055	115,687	116.7
Montana.....	299,009	260,447	114.8	Total U. S., 1940.....	66,061,592	65,607,683	100.7

Comparison With Previous Census Years

1860.....	16,085,204	15,358,117	104.7	1900.....	38,816,448	37,178,127	104.4
1870.....	19,493,565	19,064,806	102.2	1910.....	47,332,277	44,639,989	106.0
1880.....	25,518,820	24,636,963	103.6	1920.....	53,900,431	51,810,189	104.0
1890.....	32,237,101	30,710,613	105.0	1930.....	62,137,380	60,637,966	102.5

Number of Villages, Towns, and Cities in the United States, 1949

Source: Buckley-Dement Advertising Corporation.

State	Population									Total
	Under 1,000	1,000 to 2,000	2,000 to 3,000	3,000 to 5,000	5,000 to 10,000	10,000 to 25,000	25,000 to 50,000	50,000 to 100,000	Over 100,000	
Alabama.....	1,285	65	45	35	18	8	3	2	1	1,462
Arizona.....	263	14	12	8	10	...	1	1	...	309
Arkansas.....	1,462	45	30	29	16	7	1	1	...	1,591
California.....	879	121	84	95	30	51	15	7	6	1,288
Colorado.....	699	3	8	11	14	6	1	1	1	744
Connecticut.....	227	52	27	21	9	14	10	2	3	365
Delaware.....	117	12	8	7	2	...	...	...	1	147
D. C.....	...	...	...	...	...	...	...	...	1	1
Florida.....	781	31	36	18	24	13	6	2	3	914
Georgia.....	1,117	60	63	20	14	16	1	4	1	1,296
Idaho.....	340	21	8	17	3	7	1	...	...	397
Illinois.....	1,694	145	102	51	69	40	15	7	2	2,125
Indiana.....	1,455	85	51	26	37	18	9	5	4	1,690
Iowa.....	1,337	86	49	40	28	11	6	4	1	1,562
Kansas.....	1,135	41	41	16	11	21	1	1	2	1,269
Kentucky.....	3,066	75	58	29	21	8	5	1	1	3,264
Louisiana.....	1,020	53	36	33	21	6	3	1	1	1,174
Maine.....	812	38	23	13	14	9	2	1	...	912
Maryland.....	945	46	31	14	15	12	4	...	1	1,068
Massachusetts.....	373	79	27	18	33	45	18	9	9	611
Michigan.....	1,502	91	70	49	42	28	7	8	3	1,800
Minnesota.....	1,399	80	54	30	18	14	1	...	3	1,599
Mississippi.....	1,179	40	24	24	12	12	1	1	...	1,293
Missouri.....	2,389	63	68	40	28	21	2	2	2	2,615
Montana.....	652	14	15	11	7	4	2	...	...	705
Nebraska.....	735	34	34	19	8	8	...	1	1	840
Nevada.....	128	6	5	4	3	1	...	...	...	147
New Hampshire.....	132	25	13	2	7	7	2	1	...	189
New Jersey.....	541	97	96	80	69	44	17	7	6	957
New Mexico.....	493	20	9	10	10	4	1	...	...	547
New York.....	2,156	185	130	63	69	64	10	6	10	2,693
North Carolina.....	851	76	63	31	24	17	4	5	1	1,072
North Dakota.....	684	30	12	2	6	3	1	...	...	738
Ohio.....	2,162	140	92	75	62	39	15	4	8	2,597
Oklahoma.....	857	45	40	30	24	17	2	...	2	1,017
Oregon.....	442	26	21	17	11	6	1	...	1	525
Pennsylvania.....	3,671	321	220	105	137	80	13	11	5	4,563
Rhode Island.....	98	14	9	4	4	7	6	1	1	144
South Carolina.....	561	57	46	27	17	6	3	2	...	719
South Dakota.....	587	22	12	9	4	5	1	...	...	640
Tennessee.....	1,740	61	28	33	20	9	2	...	4	1,897
Texas.....	2,801	132	130	52	72	29	7	7	4	3,234
Utah.....	247	31	18	15	7	2	1	...	1	322
Vermont.....	376	12	13	3	7	3	1	...	...	415
Virginia.....	1,794	41	34	33	15	8	5	3	2	1,935
Washington.....	619	32	31	23	10	11	3	...	3	732
West Virginia.....	1,894	89	62	23	15	8	3	3	...	2,097
Wisconsin.....	1,319	66	43	35	23	18	15	2	1	1,522
Wyoming.....	224	6	12	6	1	5	...	...	...	254
Total.....	51,240	2,928	2,143	1,355	1,121	772	228	113	96	59,997

Number of Families in the U. S.

Source: U. S. Bureau of the Census.

Area	1930			Area	1940		
	Number	% White	% Negro		Number	% White	% Negro
Urban.....	17,372,524	92.1	7.6	Urban.....	20,648,432	91.7	8.0
Rural-nonfarm.....	5,927,502	91.1	8.4	Rural-nonfarm.....	7,225,889	92.3	7.3
Rural-farm.....	6,604,637	84.5	14.8	Rural-farm.....	7,074,345	85.8	13.5
Total.....	29,904,663	90.2	9.4	Total.....	34,948,666	90.6	9.0

Causes of Death in the U. S., 1948

Source: Federal Security Agency, Public Health Service.

(Death figures for numbered items are totals of sub-items below them. Rates, however, are figured independently for each item and sub-item, and totals of sub-item rates do not always equal item rates.)

Causes of death	Number*	Rate†	Causes of death	Number*	Rate†
1. Infectious and parasitic diseases:	73,016	50.0	9. Diseases of digestive system:	63,319	43.3
Tuberculosis (all forms).....	43,833	30.0	Ulcer of stomach.....	5,297	3.6
Syphilis.....	11,616	8.0	Ulcer of duodenum.....	3,411	2.3
Influenza (grippe).....	5,068	3.5	Appendicitis.....	4,171	2.9
Other.....	12,499	8.1	Hernia.....	4,321	3.0
2. Cancer and other tumors:	202,386	138.5	Other.....	46,119	31.7
Cancer.....	197,042	134.9	10. Diseases of genito-urinary system:	90,549	62.0
Other tumors.....	5,344	3.7	Nephritis.....	77,377	53.0
3. Rheumatism, diseases of nutrition and endocrine glands, other general diseases, and avitaminoses:	46,730	32.0	Other.....	13,172	9.0
Rheumatic diseases.....	2,754	1.9	11. Diseases of pregnancy, childbirth, and puerperium:	4,122	2.8
Diabetes mellitus.....	38,638	26.4	Abortion.....	496	0.3
Glandular diseases.....	3,985	2.7	Other.....	3,625	2.5
Avitaminoses.....	854	0.5	12. Diseases of skin and cellular tissue	941	0.6
Other.....	499	0.3	13. Diseases of bones and organs of movement.....	759	0.5
4. Diseases of blood and blood-forming organs.....	11,697	8.0	14. Congenital malformations.....	19,246	13.2
5. Chronic poisoning and intoxication:	2,550	1.7	15. Diseases peculiar to first year of life:	61,543	42.1
Alcoholism (ethylism).....	2,433	1.7	Premature birth.....	39,085	26.7
Chronic poisoning.....	117	0.0	Injury at birth.....	12,191	8.3
6. Diseases of nervous system and sense organs.....	145,534	99.6	Other.....	10,267	7.0
7. Diseases of circulatory system:	505,716	346.1	16. Senility.....	9,209	6.3
Heart disease (all forms).....	471,469	322.7	17. Violent or accidental deaths:	123,009	84.2
Other.....	34,247	23.3	Suicide.....	16,354	11.2
8. Diseases of respiratory system:	65,929	45.1	Homicide.....	8,536	5.8
Pneumonia (all forms).....	51,425	35.2	Accidental deaths.....	98,001	67.1
Other.....	14,504	10.0	Legal executions.....	118	0.1
			18. Ill-defined and unknown causes.....	18,082	12.4
			Total deaths for 1948.....	1,444,337	988.5

* Exclusive of stillbirths and deaths among armed forces overseas. † Rates per 100,000 estimated midyear population, excluding armed forces overseas.

Estimated Population of U. S. by Color, Sex and Age, 1948 and 1949

Source: U. S. Bureau of the Census.

Age	White males*		White females*		Nonwhite males*		Nonwhite females*	
	1948†	1949†	1948†	1949†	1948†	1949†	1948†	1949†
Under 5.....	6,780,000	7,113,000	6,469,000	6,781,000	919,000	955,000	920,000	956,000
5 to 9.....	5,722,000	5,977,000	5,469,000	5,709,000	856,000	888,000	848,000	879,000
10 to 14.....	4,806,000	4,928,000	4,633,000	4,742,000	721,000	748,000	720,000	743,000
15 to 19.....	4,889,000	4,777,000	4,745,000	4,638,000	670,000	664,000	677,000	673,000
20 to 24.....	5,323,000	5,275,000	5,324,000	5,244,000	674,000	676,000	691,000	690,000
25 to 29.....	5,269,000	5,344,000	5,448,000	5,504,000	615,000	630,000	673,000	679,000
30 to 34.....	4,913,000	4,957,000	5,151,000	5,205,000	545,000	547,000	635,000	638,000
35 to 39.....	4,727,000	4,789,000	4,867,000	4,947,000	507,000	518,000	569,000	583,000
40 to 44.....	4,372,000	4,441,000	4,444,000	4,525,000	454,000	451,000	498,000	495,000
45 to 49.....	4,006,000	4,065,000	4,051,000	4,122,000	422,000	430,000	460,000	476,000
50 to 54.....	3,686,000	3,705,000	3,705,000	3,749,000	340,000	345,000	347,000	357,000
55 to 59.....	3,345,000	3,381,000	3,331,000	3,400,000	273,000	278,000	272,000	282,000
60 to 64.....	2,722,000	2,803,000	2,726,000	2,824,000	209,000	214,000	194,000	202,000
65 to 69.....	1,982,000	2,036,000	2,077,000	2,142,000	151,000	154,000	137,000	140,000
70 to 74.....	1,395,000	1,421,000	1,550,000	1,585,000	101,000	104,000	99,000	101,000
75 and over.....	1,456,000	1,506,000	1,737,000	1,814,000	118,000	124,000	138,000	144,000
Total.....	65,393,000	66,516,000	65,726,000	66,930,000	7,576,000	7,726,000	7,876,000	8,043,000
14 and over.....	48,994,000	49,443,000	50,035,000	50,617,000	5,211,000	5,275,000	5,522,000	5,605,000
21 and over.....	42,149,000	42,697,000	43,384,000	44,061,000	4,272,000	4,336,000	4,573,000	4,655,000
Median age‡.....	29.9	29.9	30.8	30.8	24.6	24.5	25.6	25.6

* Including armed forces overseas. † As of July 1. Estimates are rounded to nearest thousand without being adjusted to group totals, which are independently rounded. ‡ Based on unrounded absolute figures.

A Brief Summary of Naturalization Requirements and Procedure

Source: Immigration and Naturalization Service.

Generally, an applicant for naturalization must have been lawfully admitted to the United States for permanent residence.

The first step toward becoming a citizen is to make a declaration of intention, commonly called taking out the first paper. An applicant for the first paper must be at least 18 years old and may take out the first paper at any time after arrival as a permanent resident and at any place where a naturalization court is located.

When applying for the first paper, an applicant must fill out Form N-300. After the Government receives and checks the Form N-300, the applicant is notified as to when and where to get the first paper. The clerk of the court fills out the first paper, using the information the applicant gave in Form N-300. The applicant must sign the first paper before the clerk of the court and swear that the statements in it are true. The fee for this is \$3.

In taking the second step toward getting a certificate of naturalization (second paper), a preliminary application must be made on Form N-400. The petition for naturalization is filed with the clerk of the court. An applicant who is required by law to attach a declaration of intention to his petition must be at least 20 years old on the day he files the petition. This age limitation does not affect a person applying under a section of the law that does not require the applicant to have a declaration of intention.

An applicant must be able to carry on an ordinary conversation in English and to sign his name (unless physically unable to talk or to write). Some courts require that an applicant for a second paper must be able to read English; the applicant should find out whether the court in his district has such a requirement.

An applicant must have lived continuously in the United States for the number of years required by law; for aliens who are required to have a first paper, that is five years; they must have lived at least the last six months of that five-year period in the state where they apply for the second paper. For wives and husbands of citizens of the United States and some of the other aliens who do not need a first paper it means one, two, or three years, depending on the date of marriage or other facts of the case.

The applicant will be notified by the Immigration and Naturalization office when and where to come for his first hearing. He must take with him two citizen witnesses. An examiner questions them separately to make sure the applicant meets the requirements. If the examiner is satisfied that the applicant does, he helps him file a petition for naturalization. The fee for this is \$8.

Generally, after the petition is filed, the applicant is notified to appear in the naturalization court for a final hearing. If his petition is granted, the applicant must under oath renounce allegiance to any foreign state of which he is a citizen or subject, and swear allegiance to the United States.

The examiner may recommend that an application for citizenship be granted, denied, or put off until the applicant is better prepared. If the examiner recommends that the petition be denied, notice of this recommendation is sent to the applicant before the case is put on the court calendar for final hearing. The applicant may ask to be examined by the judge in court if he feels that the examiner's recommendation is not just.

Naturalization Statistics, 1907 to 1949

Period	Declarations filed	Petitions filed			Persons naturalized		
		Civilian	Military	Total	Civilian	Military	Total
1907 to 1910.....	526,322	.....	.....	164,036	111,738	.....	111,738
1911 to 1920.....	2,686,909	1,137,084	244,300	1,381,384	884,672	244,300	1,128,972
1921 to 1930.....	2,709,014	1,827,073	57,204	1,884,277	1,716,979	56,206	1,773,185
1931 to 1940.....	1,369,479	1,612,411	24,702	1,637,113	1,498,573	19,891	1,518,464
1941.....	224,123	.....	.....	277,807	275,747	1,547	277,294
1942.....	221,796	341,979	1,508	343,487	268,762	1,602	270,364
1943.....	115,664	338,885	38,240	377,125	281,459	37,474*	318,933
1944.....	42,368	275,486	50,231	325,717	392,766	49,213*	441,979
1945.....	31,195	172,905	23,012	195,917	208,707	22,695*	231,402
1946.....	28,787	110,071	13,793	123,864	134,849	15,213*	150,062
1947.....	37,771	70,767	18,035	88,802	77,442	16,462*	93,904
1948.....	60,187	.....	.....	68,265	69,080	1,070	70,150
1949.....	64,866	.....	.....	71,044	64,138	2,456	66,594
1941 to 1949.....	826,757	.....	.....	1,872,028	1,772,950	147,732	1,920,682
1907 to 1949.....	8,118,481	.....	.....	6,938,838	5,984,912	468,129	6,453,041

* Members of the armed forces include 1,425 naturalized in 1943; 6,496 in 1944; 5,660 in 1945; 2,052 in 1946; and 5,370 in 1947.

Immigration by Country of Origin, 1820 to 1949

Source: Immigration and Naturalization Service.

(Figures are totals, not annual averages, and were tabulated as follows: 1820-67, alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted. Data before 1906 relate to country whence alien came; since 1906, to country of last permanent residence.)

Countries	1820-1900	1901-1910	1911-1920	1921-1930	1931-1940	1941-1949	1820-1949
Europe: Albania ¹				1,663	2,040	71	3,774
Austria ²	1,027,195	2,145,266	453,649	32,868	3,563	8,393	3,670,934
Belgium	62,161	41,635	33,746	15,846	4,817	10,760	168,965
Bulgaria ³	160	39,280	22,533	2,945	938	362	66,218
Czechoslovakia ⁴			3,426	102,194	14,393	7,401	127,414
Denmark	192,768	65,285	41,983	32,430	2,559	4,299	339,324
Estonia ⁵				1,576	506	208	2,290
Finland ⁶			756	16,691	2,146	1,997	21,590
France	397,489	73,379	61,897	49,610	12,623	34,379	629,377
Germany ⁷	5,010,248	341,498	143,945	412,202	114,058	97,986	6,119,937
Great Britain: England	1,824,054	388,017	249,944	157,420	21,756	102,061	2,743,252
Scotland	368,280	120,469	59,785	159,781	6,887	13,832	747,606
Wales	42,076	17,464	13,107	13,012	735	2,944	89,338
Not specified ⁸	793,741						793,741
Greece	18,685	167,519	184,201	51,084	9,119	7,794	438,402
Hungary ⁹			442,693	30,680	7,861	3,279	484,513
Ireland	3,873,104	339,065	146,181	220,591	13,167	19,535	4,611,643
Italy	1,040,479	2,045,877	1,109,524	455,315	68,028	45,207	4,764,430
Latvia ¹⁰				3,399	1,192	356	4,947
Lithuania ¹¹				6,015	2,201	678	8,894
Luxemburg ¹²				727	565	756	2,048
Netherlands	127,681	48,262	43,718	26,948	7,150	11,780	265,539
Norway ¹³	474,684	190,505	66,395	68,531	4,740	7,838	812,693
Poland ¹⁴	165,182		4,813	227,734	17,026	6,875	421,630
Portugal	63,840	69,149	89,732	29,994	3,329	6,317	262,361
Rumania ¹⁵	19,109	53,008	13,311	67,646	3,871	921	157,866
Spain	41,361	27,935	68,611	28,958	3,258	2,515	172,638
Sweden ¹⁶	771,631	249,534	95,074	97,249	3,960	8,482	1,225,930
Switzerland	202,479	34,922	23,091	29,676	5,512	8,693	304,373
Turkey in Europe	5,824	79,976	54,677	14,659	737	471	156,344
U.S.S.R. ¹⁷	761,742	1,597,306	921,201	61,742	1,356	542	3,343,889
Yugoslavia ¹⁸			1,888	49,064	5,835	1,387	58,174
Other Europe	1,940	665	8,111	9,603	2,361	4,470	27,150
Total Europe	17,285,913	8,136,016	4,376,564	2,477,853	348,289	422,589	33,047,224
Asia: China	305,455	20,605	21,278	29,907	4,928	15,429	397,602
India	696	4,713	2,082	1,886	496	1,640	11,513
Japan ¹⁹	28,547	129,797	83,837	33,462	1,948	1,455	279,046
Turkey in Asia ²⁰	29,088	77,393	79,389	19,165	328	205	205,568
Other Asia	5,883	11,059	5,973	12,980	7,644	9,272	52,811
Total Asia	369,669	243,567	192,559	97,400	15,344	28,001	946,540
America: Canada & Newfoundland ²¹	1,051,275	179,226	742,185	924,515	108,527	149,833	3,155,561
Central America	2,173	8,192	17,159	15,769	5,861	19,496	68,650
Mexico ²²	28,003	49,642	219,004	459,287	22,319	53,845	832,100
South America	12,105	17,280	41,899	42,215	7,803	18,547	139,849
West Indies	125,598	107,548	123,424	74,899	15,502	43,519	490,490
Other America ²³				31	25	25,373	25,429
Total America	1,219,154	361,888	1,143,671	1,516,716	160,037	310,613	4,712,079
Africa	2,213	7,368	8,443	6,286	1,750	6,518	32,578
Australia & New Zealand	19,679	11,975	12,348	8,299	2,231	13,345	67,877
Pacific Islands	7,810	1,049	1,079	427	780	4,651	15,796
Countries not specified	219,168	33,523 ²⁴	1,147	228		135	254,201
Total all countries	19,123,606	8,795,386	5,735,811	4,107,209	528,431	785,852	39,076,295

¹ Countries established since beginning of World War I are theretofore included with countries to which they belonged. ² Data for Austria-Hungary not reported until 1861. Austria and Hungary recorded separately after 1906. ³ Bulgaria, Serbia, Montenegro first reported in 1899. Bulgaria reported separately since 1920. In 1920, separate enumeration for Kingdom of Serbs, Croats, Slovenes; since 1923, recorded as Yugoslavia. ⁴ For United Kingdom. ⁵ No record included with Sweden 1820-68. ⁶ Included with Austria-Hungary, Germany and Russia 1899-1919. ⁷ No record of immigration until 1830. ⁸ Since 1931, U.S.S.R. has been broken down into European Russia and Siberia or Asiatic Russia. ⁹ No record of immigration until 1861. ¹⁰ No record of immigration until 1869. ¹¹ Includes all British North American possessions 1820-93. ¹² No record of immigration 1889-93. ¹³ Included with "Countries not specified" prior to 1925. ¹⁴ Includes 32,897 persons returning in 1906 to their homes in U. S.

U. S. Foreign-born Population by Country of Birth

Source: U. S. Bureau of the Census.

Country of birth	Total foreign-born 1900	Foreign-born white				Per cent ¹	
		1910	1920	1930	1940	1930	1940
Northwestern Europe							
England.....	840,513	876,455	812,828	808,684	621,975	5.8	5.4
Scotland.....	233,524	261,034	254,567	354,323	279,321	2.5	2.4
Wales.....	93,586	82,479	67,066	60,205	35,360	.4	.3
Northern Ireland.....	1,615,459	1,352,155	1,037,233	178,832	106,416	1.3	.9
Eire.....				744,810	572,031	5.3	5.0
Norway.....	336,388	403,858	363,862	347,852	262,088	2.5	2.3
Sweden.....	582,014	665,183	625,580	595,250	445,070	4.3	3.9
Denmark.....	153,690	181,621	189,154	179,474	138,175	1.3	1.2
Iceland.....				2,764	2,104	...	...
Netherlands.....	94,931	120,053	131,766	133,133	111,064	1.0	1.0
Belgium.....	29,757	49,397	62,686	64,194	53,958	.5	.5
Luxemburg.....	3,031	3,068	12,585	9,048	6,886	.1	.1
Switzerland.....	115,593	124,834	118,659	113,010	88,293	.8	.8
France.....	104,197	117,236	152,890	135,265	102,930	1.0	.9
Central Europe							
Germany.....	2,663,418	2,311,085	1,686,102	1,608,814	1,237,772	11.5	10.8
Poland.....	383,407	293,884	1,139,978	1,268,583	993,479	9.1	8.7
Czechoslovakia.....			362,436	491,638	319,971	3.5	2.8
Austria.....	432,798	285,506	575,625	370,914	479,906	2.7	4.2
Hungary.....	145,714	495,600	397,282	274,450	290,228	2.0	2.5
Yugoslavia.....			169,437	211,416	161,093	1.5	1.4
Eastern Europe							
U.S.S.R.....	423,726	21,184,382	1,400,489	1,153,624	1,040,884	8.2	9.1
Latvia.....				20,673	18,636	.1	.2
Estonia.....				3,550	4,178	...	...
Lithuania.....			135,068	193,606	165,771	1.4	1.5
Finland.....	62,641	129,669	149,824	142,478	117,210	1.0	1.0
Rumania.....	15,032	65,920	102,823	146,393	115,940	1.0	1.0
Bulgaria.....		11,453	10,477	9,399	8,888	.1	...
Turkey in Europe.....	29,910	32,221	5,284	2,257	4,412	...	.1
Southern Europe							
Greece.....	8,515	101,264	175,972	174,526	163,252	1.2	1.4
Italy.....	484,027	1,343,070	1,610,109	1,790,424	1,623,580	12.8	14.2
Spain.....	7,050	21,977	49,247	59,033	47,707	.4	.4
Portugal.....	30,608	2,623	67,453	69,993	62,347	.5	.5
Other Europe.....	2,251	4,851	11,509	25,065	19,819	.2	.2
Asia							
Palestine.....	(3)	1,702	3,202	6,135	7,047	...	.1
Syria.....			51,900	57,227	50,859	.4	.4
Turkey in Asia.....			11,014	46,651	52,479	.3	.5
Other Asia.....	120,248	4,612	44,334	47,567	39,524	.3	.3
America							
Canada-French.....	395,126	385,083	307,786	370,852	273,366	2.7	2.4
Canada-other.....	784,796	810,987	810,092	907,660	770,753	6.5	6.7
Newfoundland.....	(6)	5,076	13,242	23,971	21,361	.2	.2
Mexico.....	103,393	219,802	478,383	639,017	377,433	4.6	3.3
Cuba.....	11,081	12,869	12,843	16,089	15,277	.1	.1
Other West Indies.....	14,354	10,300	13,526	15,511	15,257	.1	.1
Central America.....	3,897	1,507	4,074	7,791	7,638	.1	.1
South America.....	4,733	7,562	16,855	30,333	28,770	.2	.3
All other							
Australia.....	6,807	8,938	10,801	12,720	10,998	.1	.1
Azores.....	9,768	15,795	33,788	35,432	25,751	.3	.2
Other Atlantic islands.....			5,196	4,053	3,232	...	...
Other and not reported.....	15,293	15,434	17,727	18,716	18,649	.1	.2
Total.....	10,341,276	13,345,545	13,712,754	13,983,405	11,419,138	100.0	100.0

¹ Percentages not shown are less than one-tenth of one percent.² Persons reported in 1910 as of Polish mother tongue born in Austria, Germany, and Russia have been deducted from their respective countries and combined as Poland.³ Turkey in Asia included with Turkey in Europe prior to 1910.⁴ Includes 4,635 persons born in Serbia and 5,363 persons born in Montenegro, which became part of Yugoslavia in 1918.⁵ Turkey in Asia included Armenia, Palestine, and Syria in 1910. Subsequent to 1910 Armenia included with "Other Asia." ⁶ Newfoundland included with Canada in 1900.

Immigration to U. S., 1820 to 1949

Source: Immig. and Naturalization Service.

Year	No. of persons*	Year	No. of persons*	Year	No. of persons*	Year	No. of persons*
1820	8,385	1853	368,645	1886	334,203	1919	141,132
1821	9,127	1854	427,833	1887	490,109	1920	430,001
1822	6,911	1855	200,877	1888	546,889	1921	805,228
1823	6,354	1856	200,436	1889	444,427	1922	309,556
1824	7,912	1857	251,306	1890	455,302	1923	522,919
1825	10,199	1858	123,126	1891	560,319	1924	706,896
1826	10,837	1859	121,282	1892	579,663	1925	294,314
1927	18,875	1860	153,640	1893	439,730	1926	304,488
1828	27,382	1861	91,918	1894	285,631	1927	335,175
1829	22,520	1862	91,985	1895	258,536	1928	307,255
1830	23,322	1863	176,282	1896	343,267	1929	279,678
1831	22,633	1864	193,418	1897	230,832	1930	241,700
1832	60,482	1865	248,120	1898	229,299	1931	97,139
1833	58,640	1866	318,568	1899	311,715	1932	35,576
1834	65,365	1867	315,722	1900	448,572	1933	23,068
1835	45,374	1868	138,840	1901	487,918	1934	29,470
1836	76,242	1869	352,768	1902	648,743	1935	34,956
1837	79,340	1870	387,203	1903	857,046	1936	36,329
1838	38,914	1871	321,500	1904	812,870	1937	50,244
1839	68,069	1872	404,806	1905	1,026,499	1938	67,895
1840	84,066	1873	459,803	1906	1,100,735	1939	82,998
1841	80,289	1874	313,339	1907	1,285,349	1940	70,756
1842	104,565	1875	227,498	1908	782,870	1941	51,776
1843	52,496	1876	169,986	1909	751,786	1942	28,781
1844	78,615	1877	141,857	1910	1,041,570	1943	23,725
1845	114,371	1878	138,469	1911	878,587	1944	28,551
1846	154,416	1879	177,826	1912	838,172	1945	38,119
1847	234,968	1880	457,257	1913	1,197,892	1946	108,721
1848	226,527	1881	669,431	1914	1,218,480	1947	147,292
1849	297,024	1882	788,992	1915	326,700	1948	170,570
1850	369,980	1883	603,322	1916	298,826	1949	188,317
1851	379,466	1884	518,592	1917	295,403		
1852	371,603	1885	395,346	1918	110,618		

* From 1820-67, figures represent alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted.

Population of Territories

Source: U. S. Bureau of the Census.

Area	Population		Per-cent in-crease
	1930	1940	
Continental United States	122,775,045	131,663,275	7.2
Alaska	59,278	72,524	22.3
American Samoa	10,055	12,908	28.4
Guam	18,509	22,290	20.4
Hawaii	368,336	423,330	14.9
Panama Canal Zone	39,467	51,827	31.3
Philippine Islands*	13,513,000	16,358,000	21.0
Puerto Rico	1,543,913	1,869,255	21.1
Virgin Islands	22,012	24,889	13.1
Military and naval, etc., services abroad	89,453	118,933	33.0
United States, with territories and possessions	138,439,069	150,621,231	8.8

* The Philippine Islands became independent on July 4, 1946.

One Accidental Death Every 5 Minutes in 1949

Source: National Safety Council.

The nation's 1949 accident totals can be figured at the following approximate rates:

Class of accident	One every	
All accidents	Deaths	6 minutes
	Injuries	3 seconds
Motor-vehicle	Deaths	17 minutes
	Injuries	29 seconds
Occupational	Deaths	35 minutes
	Injuries	17 seconds
Workers off-job	Deaths	17 minutes
	Injuries	12 seconds
Home	Deaths	17 minutes
	Injuries	7 seconds
Public non-motor-vehicle	Deaths	34 minutes
	Injuries	16 seconds

Death Rates for Selected Causes, 1910-48

(Exclusive of stillbirths. Rates per 100,000 estimated midyear population)

Source: Federal Security Agency, Public Health Service.

Cause	1910	1920	1930	1940	1948 ¹
Accidents ²	82.7 ³	60.7 ⁴	53.8	47.3	45.0
Appendicitis	10.8	13.2	15.2	9.9	2.9
Cancer ⁵	76.2	83.4	97.4	120.0	134.9
Cirrhosis of liver	13.3	7.1	7.2	8.6	11.3
Diabetes mellitus	15.3	16.1	19.1	26.5	26.4
Diphtheria	21.1	15.3	4.9	1.1	.4
Heart disease	158.9 ⁶	159.6 ⁶	214.2	291.9	322.7
Homicide	4.6	6.8	8.8	6.2	5.8
Influenza	14.2	70.5	19.4	15.3	3.5
Malaria	1.1	3.4	2.9	1.1	.1

Cause	1910	1920	1930	1940	1948 ¹
Mot.-veh. accidents	1.8 ⁶	10.3 ⁶	26.7	26.1	22.1
Nephritis	94.8	88.8	91.0	81.4	53.0
Pneumonia	141.7	136.8	83.1	54.8	35.2
Premature birth	37.7	43.6	31.5	24.5	26.7
Scarlet fever	11.1	4.6	1.9	.5	.0
Suicide	15.3	10.2	15.6	14.3	11.2
Syphilis	13.5	16.5	15.7	14.4	8.0
Tuberculosis	153.8	113.1	71.1	45.8	30.0
Typhoid ⁷	22.5	7.6	4.8	1.1	.2
Whooping cough	11.6	12.5	4.8	2.2	.8

¹ Excludes armed forces overseas. ² Other than motor-vehicle accidents. ³ Includes legal executions. ⁴ Includes other malignant tumors. ⁵ Excludes diseases of coronary arteries. ⁶ Excludes automobile collisions with trains and street cars, and motorcycle accidents. ⁷ Includes paratyphoid fever.

NOTE: Rates are for population in death-registration states: 1910—51.4% of U. S. population; 1920—80.9%; 1930—95.8%; 1940-48—100%.

Births and Deaths, by States, 1947-48

Source: Federal Security Agency, Public Health Service.

State	Births ¹				Deaths ^{1,2}			
	1947	Rate ³	1948	Rate ³	1947	Rate ³	1948	Rate ³
Alabama.....	88,116	31.1	85,372	29.4	26,347	9.3	26,620	9.2
Arizona.....	19,153	29.7	19,195	27.3	6,032	9.4	6,586	9.4
Arkansas.....	48,983	25.6	48,036	24.8	15,095	7.9	15,224	7.9
California.....	245,889	25.1	240,702	23.2	96,697	9.9	98,905	9.6
Colorado.....	32,874	28.7	33,010	27.5	12,613	11.0	12,582	10.5
Connecticut.....	45,581	23.1	42,229	21.2	19,153	9.7	19,569	9.8
Delaware.....	7,717	26.5	7,254	24.2	3,345	11.5	3,407	11.4
D. C.....	21,686	25.2	20,815	24.1	8,254	9.6	8,197	9.5
Florida.....	59,807	25.7	59,600	24.5	24,283	10.4	24,767	10.2
Georgia.....	94,944	30.3	92,694	29.3	28,946	9.2	29,526	9.3
Idaho.....	16,265	31.0	16,132	27.5	4,780	9.1	4,906	8.4
Illinois.....	196,007	23.3	184,871	22.1	93,686	11.2	91,328	10.9
Indiana.....	96,359	25.1	92,529	23.6	40,567	10.6	39,544	10.1
Iowa.....	63,858	24.6	60,575	23.2	26,484	10.2	26,064	10.0
Kansas.....	44,535	23.1	42,714	22.5	18,700	9.7	18,553	9.8
Kentucky.....	79,987	28.8	77,176	27.0	28,371	10.2	28,050	9.8
Louisiana.....	74,630	29.3	73,312	28.3	23,395	9.2	23,561	9.1
Maine.....	23,873	27.0	22,071	24.6	9,959	11.3	9,958	11.1
Maryland.....	56,687	26.5	53,423	24.8	22,480	10.5	22,440	10.4
Massachusetts.....	107,791	23.3	97,389	21.0	51,754	11.2	52,611	11.3
Michigan.....	161,085	26.5	154,730	24.9	57,137	9.4	56,786	9.1
Minnesota.....	75,577	26.2	72,780	24.8	27,781	9.6	27,400	9.3
Mississippi.....	66,450	31.7	65,303	30.9	20,212	9.6	20,296	9.6
Missouri.....	90,060	23.1	85,258	21.9	44,572	11.4	42,752	11.0
Montana.....	15,086	30.9	15,035	29.4	5,760	11.8	5,884	11.5
Nebraska.....	32,132	25.0	31,176	24.3	12,871	10.0	12,615	9.8
Nevada.....	4,041	29.1	3,694	22.5	1,623	11.7	1,624	9.9
New Hampshire.....	13,267	24.8	12,423	23.8	6,194	11.6	6,172	11.8
New Jersey.....	106,242	23.0	97,580	20.5	48,181	10.4	48,076	10.1
New Mexico.....	20,322	37.2	20,519	35.9	5,471	10.0	5,609	9.8
New York.....	323,250	22.8	301,966	21.2	157,734	11.1	158,242	11.1
North Carolina.....	112,877	30.5	109,430	28.8	30,187	8.2	30,161	7.9
North Dakota.....	17,064	31.5	16,584	28.5	5,252	9.7	5,146	8.8
Ohio.....	197,311	25.7	186,353	23.8	82,254	10.7	80,891	10.3
Oklahoma.....	53,684	23.5	50,386	22.0	19,327	8.5	19,079	8.3
Oregon.....	36,294	23.5	35,206	21.5	13,501	8.7	14,080	8.6
Pennsylvania.....	248,513	23.6	227,227	21.7	110,459	10.5	109,202	10.4
Rhode Island.....	18,536	24.9	16,861	22.6	8,368	11.2	8,188	11.0
South Carolina.....	59,470	30.5	57,759	29.1	17,230	8.8	17,957	9.1
South Dakota.....	16,539	28.6	16,405	26.8	5,730	9.9	5,806	9.5
Tennessee.....	86,619	28.0	82,127	25.8	28,591	9.2	28,826	9.1
Texas.....	198,662	28.0	197,750	26.8	62,662	8.8	64,245	8.7
Utah.....	21,724	33.9	20,714	30.9	4,995	7.8	5,070	7.6
Vermont.....	9,708	26.5	9,369	25.8	4,378	12.0	4,096	11.3
Virginia.....	85,740	28.6	82,057	26.9	29,193	9.7	28,976	9.5
Washington.....	58,481	24.8	55,833	22.7	21,979	9.3	22,211	9.0
West Virginia.....	55,085	29.3	52,396	27.4	17,218	9.1	17,600	9.2
Wisconsin.....	84,059	25.9	81,630	24.7	33,219	10.2	32,564	9.9
Wyoming.....	7,320	27.6	7,418	26.0	2,349	8.9	2,385	8.4
Total U. S.....	3,699,940	25.8	3,535,068	24.2	1,445,370	10.1	1,444,337	9.9

¹ By place of residence and exclusive of stillbirths. ² Exclusive of armed forces overseas. ³ Per 1,000 estimated midyear population present in area.

Live Births by Race, U. S., 1940-48

Source: Federal Security Agency, Public Health Service.

Year	White	Negro	Indian	Chinese	Japanese	Other	Total
1940.....	2,067,953	278,869	9,547	1,098	1,873	1,059	2,360,399
1944.....	2,454,700	324,183	10,541	1,291	2,889	1,196	2,794,800
1945.....	2,395,563	324,264	10,172	1,382	2,936	1,139	2,735,456
1946.....	2,913,645	358,114	11,191	1,534	2,756	1,432	3,288,672
1947.....	3,274,620	406,957	11,509	2,170	3,049	1,855	3,699,940
1948.....	3,080,316	434,174	11,379	4,210	3,045	1,944	3,535,068

Live Births by Age and Race of Parents, U. S., 1948

Source: Federal Security Agency, Public Health Service.

Age and race of mother	Age of father											All ages
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 & over	Not stated	
White												
10-14.....	1	377	568	132	27	19	11	7	4	1	606	1,753
15-19.....	12	39,911	199,925	60,846	11,596	3,120	950	402	169	119	16,839	333,889
20-24.....	5	8,269	410,529	424,351	109,564	27,056	8,338	2,761	941	688	16,629	1,009,131
25-29.....	4	404	45,819	397,144	307,076	88,526	23,135	7,351	2,297	1,466	7,862	881,084
30-34.....	3	58	3,493	45,286	225,936	169,447	53,059	14,893	5,003	2,667	3,890	523,735
35-39.....	2	20	549	4,513	27,032	106,943	76,730	25,777	7,702	4,218	2,222	255,708
40-44.....	1	5	64	328	1,743	8,335	26,942	18,174	6,444	3,194	642	65,872
45-49.....	..	3	11	20	53	139	518	1,783	1,037	574	46	4,184
50 & over.....	..	..	1	10	12	16	19	10	28	25	3	124
Not stated.....	..	47	653	903	650	481	276	116	34	35	1,641	4,836
All ages.....	28	49,094	661,612	933,533	683,689	404,082	189,978	71,274	23,659	12,987	50,380	3,080,316
Nonwhite												
10-14.....	11	601	398	87	19	11	5	8	1	3	1,987	3,131
15-19.....	7	13,565	42,293	11,768	2,304	938	338	122	33	44	26,632	98,044
20-24.....	3	1,381	55,493	52,077	14,510	5,592	2,138	922	295	222	18,113	150,746
25-29.....	..	56	4,703	36,311	29,127	12,997	4,703	2,149	716	521	8,537	99,820
30-34.....	..	16	416	3,555	17,890	17,881	7,373	3,131	1,259	801	4,424	56,746
35-39.....	1	8	85	571	2,248	11,474	9,378	4,394	1,614	1,320	2,620	33,713
40-44.....	2	2	16	47	151	678	3,210	2,455	943	712	676	8,892
45-49.....	..	2	4	5	9	29	84	343	171	145	77	869
50 & over.....	..	..	..	1	5	5	3	6	5	8	5	38
Not stated.....	..	34	268	291	211	174	79	64	18	8	1,606	2,753
All ages.....	24	15,665	103,676	104,713	66,474	49,779	27,311	13,594	5,055	3,784	64,677	454,752

Life Expectancy in the United States

(This table, based on the 1940 population census and deaths of 1939-41, indicates the average future lifetime in years of all individuals at the ages shown.)

Source: U. S. Bureau of the Census.

Age	White		Negro		Age	White		Negro	
	Males	Females	Males	Females		Males	Females	Males	Females
0.....	62.8	67.3	52.3	55.6	50.....	22.0	24.7	19.1	21.0
1.....	65.0	68.9	55.9	58.5	55.....	18.3	20.1	16.6	18.4
5.....	61.7	65.6	53.0	55.4	60.....	15.1	17.0	14.4	16.1
10.....	57.0	60.9	48.3	50.8	65.....	12.1	13.6	12.2	13.9
15.....	52.3	56.1	43.7	46.1	70.....	9.4	10.5	10.1	11.8
20.....	47.8	51.4	40.0	42.0	75.....	7.2	7.9	8.2	9.8
25.....	43.3	46.8	35.7	38.2	80.....	5.4	5.9	6.6	8.0
30.....	38.8	42.2	32.1	34.4	85.....	4.0	4.3	5.3	6.4
35.....	34.4	37.7	28.5	30.7	90.....	3.1	3.2	4.2	5.0
40.....	30.0	33.3	25.1	27.2	95.....	2.4	2.5	3.2	3.7
45.....	25.9	28.9	21.9	23.9	100.....	2.0	2.0	2.3	2.7

Comparison with Other Years, White Males and Females

Years	At birth		Age 20		Age 45		Age 70	
	Males	Females	Males	Females	Males	Females	Males	Females
1900-1902*	48.2	51.1	42.2	43.8	24.2	25.5	9.0	9.6
1919-1921†	56.3	58.5	45.6	46.5	26.0	27.0	9.5	9.9
1929-1931.....	59.1	62.7	46.0	48.5	25.3	27.4	9.2	10.0
1930-1939.....	60.6	64.5	46.8	49.7	25.5	28.0	9.3	10.2
1939-1941.....	62.8	67.3	47.8	51.4	25.9	28.9	9.4	10.5

* For original death-registration area (26.2% of national population).

† For death-registration area of 1920 (20.9% of national population).

Births and Deaths in the United States, 1915 to 1949

(Excluding stillbirths)

Source: Federal Security Agency, Public Health Service.

Year	Reg. % ¹	Births in registration states				Reg. % ¹	Deaths in registration states				Rate ²
		Males	Females	Total	Rate ²		Males	Females	Total	Rate ²	
1915	30.9	398,615	377,689	776,304	25.0	61.6	443,928	371,572	815,500	13.2	
1918	53.4	701,164	662,485	1,363,649	24.7	76.6	784,307	645,772	1,430,079	18.1	
1919	58.6	705,593	667,845	1,373,438	22.4	79.6	567,185	505,078	1,072,263	12.9	
1920	59.7	775,322	733,552	1,508,874	23.7	80.9	586,136	531,934	1,118,070	13.0	
1921	65.2	881,591	832,670	1,714,261	24.2	80.9	533,267	476,406	1,009,673	11.5	
1922	72.3	911,831	863,080	1,774,911	22.3	84.2	575,927	508,025	1,083,952	11.7	
1923	72.4	921,020	871,626	1,792,646	22.1	86.5	625,259	548,806	1,174,065	12.1	
1924	76.2	992,431	938,183	1,930,614	22.2	87.0	619,874	531,202	1,151,076	11.6	
1925	76.2	966,973	911,907	1,878,880	21.3	88.1	641,397	550,412	1,191,809	11.7	
1926	77.0	953,638	902,430	1,856,068	20.5	88.4	677,032	580,224	1,257,256	12.1	
1927	87.6	1,099,287	1,038,549	2,137,836	20.5	90.0	656,697	554,930	1,211,627	11.3	
1928	94.3	1,147,625	1,085,524	2,233,149	19.7	94.3	738,891	623,096	1,361,987	12.0	
1929	94.7	1,114,814	1,055,106	2,169,920	18.8	94.7	745,491	624,266	1,369,757	11.9	
1930	94.7	1,131,976	1,071,382	2,203,358	18.9	95.3	726,680	600,560	1,327,240	11.3	
1931	94.7	1,084,404	1,028,356	2,112,760	18.0	95.3	717,630	589,643	1,307,273	11.1	
1932	95.2	1,063,885	1,010,157	2,074,042	17.4	95.2	704,506	588,763	1,293,269	10.9	
1933	100.0	1,068,871	1,012,361	2,081,232	16.6	100.0	737,312	604,794	1,342,106	10.7	
1934	100.0	1,112,703	1,054,933	2,167,636	17.2	100.0	772,595	624,308	1,396,903	11.1	
1935	100.0	1,105,489	1,049,616	2,155,105	16.9	100.0	771,320	621,432	1,392,752	10.9	
1936	100.0	1,099,465	1,045,325	2,144,790	16.7	100.0	821,439	657,789	1,479,228	11.6	
1937	100.0	1,130,641	1,072,696	2,203,337	17.1	100.0	808,834	641,593	1,450,427	11.3	
1938	100.0	1,172,541	1,114,421	2,286,962	17.6	100.0	764,902	616,489	1,381,391	10.6	
1939	100.0	1,162,600	1,102,988	2,265,588	17.3	100.0	768,877	619,020	1,387,897	10.6	
1940	100.0	1,211,684	1,148,715	2,360,399	17.9 ⁴	100.0	791,003 ⁴	626,266 ⁴	1,417,269 ⁴	10.7 ⁴	
1941	100.0	1,289,734	1,223,693	2,513,427	18.9 ⁴	100.0	785,033 ⁴	612,609 ⁴	1,397,642 ⁴	10.5 ⁴	
1942	100.0	1,444,365	1,364,631	2,808,996	20.9 ⁴	100.0	780,454 ⁴	604,733 ⁴	1,385,187 ⁴	10.4 ⁴	
1943	100.0	1,506,959	1,427,901	2,934,860	21.5 ⁴	100.0	817,485 ⁴	642,059 ⁴	1,459,544 ⁴	10.9 ⁴	
1944	100.0	1,435,301	1,359,499	2,794,800	20.2 ⁴	100.0	789,861 ⁴	621,477 ⁴	1,411,338 ⁴	10.6 ⁴	
1945	100.0	1,404,587	1,330,869	2,735,456	19.6 ⁴	100.0	788,063 ⁴	613,556 ⁴	1,401,719 ⁴	10.6 ⁴	
1946	100.0	1,691,220	1,597,452	3,288,672	23.3 ⁴	100.0	785,689 ⁴	609,928 ⁴	1,395,617 ⁴	10.0 ⁴	
1947	100.0	1,899,876	1,800,064	3,699,940	25.8 ⁴	100.0	818,234 ⁴	627,136 ⁴	1,445,370 ⁴	10.1 ⁴	
1948	100.0	1,813,852	1,721,216	3,535,068	24.2 ⁴	100.0	820,931 ⁴	623,406 ⁴	1,444,337 ⁴	9.9 ⁴	
1949 ⁵	100.0	.....	.....	3,581,000	24.1 ⁶	100.0	.....	.....	1,446,000 ⁶	9.7 ⁴	

¹ Represents percentage of national population living in birth- and death-registration states for each year given.
² Per 1,000 population. ³ Excludes deaths among armed forces overseas. ⁴ Based on total population including armed forces overseas. ⁵ Based on population excluding armed forces overseas. ⁶ Estimated.

Motor Vehicle Deaths by Type of Accident, 1913 to 1949

Source: National Safety Council.

Year	Deaths from collisions with—						Deaths from non-collision accidents*	Total deaths†
	Pedestrians	Other motor vehicles	Railroad trains	Street cars	Bi-cycles	Animal-drawn vehicle or animal		
1913	.....	.....	.....	.....	.....	.....	.....	4,200
1918	.....	.....	.....	.....	.....	.....	.....	10,700
1923	.....	.....	.....	.....	.....	.....	.....	18,400
1928	11,420	4,310	2,140	570	950		8,070	28,000
1933	12,840	6,470	1,437	318	400	310	8,680	31,363
1938	12,850	8,900	1,490	165	720	170	7,350	32,582
1943	9,900	5,300	1,448	171	450	160	5,690	23,825
1945	11,000	7,150	1,739	163	500	130	6,600	28,076
1946	11,600	9,400	1,732	174	540	130	8,900	33,411
1947	10,450	9,900	1,736	102	550	150	8,800	32,697
1948	9,950	10,200	1,474	83	500	100	8,950	32,259
1949	8,900	10,300	1,418	50	500	100	9,250	31,500

* The proportion of deaths allocated to fixed-object collisions and noncollision accidents is different from that reported by most states. State reports generally indicate that many accidents involving no collision on the roadway are classified as fixed-object collisions because the motor vehicle collides with an object after leaving the roadway.

† The totals do not quite equal the sum of the various types because the estimates were generally made only to the nearest 10 deaths, and to the nearest 50 deaths for certain types.

Accidental Deaths by Age, 1913 to 1949

Source: National Safety Council.

Year	0-4 years	5-14 years	15-24 years	25-44 years	45-64 years	65 years and over*	All ages
1913.....	9,800	7,450	11,950	24,350	16,450	12,500	82,500
1918.....	10,400	10,000	10,550	22,050	17,550	14,550	85,100
1923.....	9,450	9,550	11,100	21,250	17,150	15,900	84,400
1928.....	8,850	9,750	13,000	23,200	20,700	19,500	95,000
1933.....	6,948	8,195	12,225	21,005	20,819	21,740	90,932
1938.....	6,646	6,593	12,129	20,464	21,689	26,284	93,805
1943.....	8,039	6,636	15,278	20,212	20,109	28,764	90,038
1945.....	7,741	6,836	12,446	19,393	20,097	29,405	95,918
1946.....	7,949	6,545	13,366	20,705	20,249	29,219	90,033
1947.....	8,219	6,069	13,166	21,155	20,513	30,457	99,579
1948 (5th Revision).....	8,387	5,859	12,595	20,274	19,809	31,077	98,001
1948 (6th Revision).....	8,387	5,859	12,595	20,274	19,809	27,100	94,000
1949.....	8,100	5,500	11,500	19,800	18,800	27,300	91,000

* Includes "age unknown"; in 1948 these deaths numbered only 182.

Death Rates per 1,000 Population, 1900 to 1948

(Excluding stillbirths)

Source: Federal Security Agency, Public Health Service.

Age, in years	1900	1920	1930	1940*	1942*	1943*	1944*	1945*	1946*	1947*	1948*
Males, all ages†.....	17.9	13.4	12.3	12.0	11.7	12.4	12.4	12.7	11.4	11.5	11.3
Under 1.....	179.1	103.6	77.0	61.7	53.7	48.2	48.3	46.8	51.1	38.1	39.4
1-4.....	20.5	10.3	6.0	3.1	2.6	2.8	2.5	2.2	1.9	1.7	1.7
5-14.....	3.8	2.8	1.9	1.2	1.1	1.1	1.1	1.0	1.0	.8	.8
15-24.....	5.9	4.8	3.5	2.3	2.3	2.6	2.8	2.7	2.1	1.9	1.8
25-34.....	8.2	6.4	4.9	3.4	3.2	3.3	3.4	3.6	2.7	2.5	2.4
35-44.....	10.7	8.2	7.5	5.9	5.7	5.6	5.4	5.6	4.9	4.9	4.8
45-54.....	15.7	12.6	13.6	12.5	12.2	12.3	11.9	11.8	11.5	11.5	11.4
55-64.....	28.7	24.6	26.6	26.0	25.1	25.6	24.8	24.7	23.9	24.6	24.2
65-74.....	59.3	54.5	55.8	54.5	52.3	54.2	52.3	51.7	50.3	52.4	52.1
75-84.....	128.3	122.1	119.1	120.2	111.3	117.8	111.5	108.7	105.1	108.2	107.0
85 and over.....	268.8	253.0	236.7	240.6	223.2	246.5	232.4	233.0	236.6	251.3	254.9
Females, all ages†.....	16.5	12.6	10.4	9.5	9.0	9.4	9.0	8.8	8.6	8.7	8.5
Under 1.....	145.4	80.7	60.7	47.7	42.0	37.5	38.1	36.4	39.2	29.4	30.4
1-4.....	19.1	9.5	5.2	2.7	2.3	2.3	2.1	1.8	1.6	1.4	1.4
5-14.....	3.9	2.5	1.5	.9	.7	.8	.7	.7	.7	.6	.5
15-24.....	5.8	5.0	3.2	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1
25-34.....	8.2	7.1	4.4	2.7	2.4	2.4	2.2	2.1	1.9	1.8	1.6
35-44.....	9.8	8.0	6.1	4.5	4.1	4.1	3.9	3.8	3.5	3.4	3.2
45-54.....	14.2	11.7	10.6	8.6	8.0	8.1	7.7	7.5	7.2	7.1	6.8
55-64.....	25.8	22.4	21.2	17.9	16.7	17.2	16.3	15.8	15.1	15.0	14.5
65-74.....	53.6	50.5	46.8	42.0	39.2	40.8	39.0	37.8	36.8	37.3	36.4
75-84.....	118.8	115.9	106.6	102.6	94.2	100.3	95.0	91.4	88.3	89.4	87.1
85 and over.....	255.2	244.7	221.4	222.3	204.7	225.7	216.4	214.7	222.7	236.9	241.3
Male and female, all ages†.....	17.2	13.0	11.3	10.7	10.4	10.9	10.6	10.6	10.0	10.1	9.9
Under 1.....	162.4	92.3	69.0	54.8	48.0	43.0	43.3	41.7	45.3	33.8	35.0
1-4.....	19.8	9.9	5.6	2.9	2.4	2.6	2.3	2.0	1.8	1.6	1.6
5-14.....	3.9	2.6	1.7	1.0	.9	1.0	.9	.8	.7	.7	.7
15-24.....	5.9	4.9	3.3	2.0	1.9	2.0	2.0	1.9	1.7	1.5	1.4
25-34.....	8.2	6.8	4.7	3.1	2.8	2.8	2.7	2.7	2.3	2.1	2.0
35-44.....	10.2	8.1	6.8	5.2	4.9	4.9	4.7	4.6	4.2	4.1	4.0
45-54.....	15.0	12.2	12.2	10.6	10.1	10.3	9.8	9.7	9.3	9.3	9.0
55-64.....	27.2	23.6	24.0	22.0	21.0	21.5	20.6	20.3	19.5	19.8	19.4
65-74.....	56.4	52.5	51.4	48.2	45.6	47.4	45.5	44.5	43.4	44.6	44.0
75-84.....	123.3	118.9	112.7	110.9	102.3	108.5	102.7	99.5	96.1	98.1	96.3
85 and over.....	260.9	248.3	228.0	230.1	212.6	234.6	223.3	222.5	228.6	243.1	247.1

* Excluding armed forces overseas. † Includes ages not reported. NOTE: Rates are for population in death-registration states: 1900—26.2% of U.S. population; 1920—80.9%; 1930—95.3%; 1940—48—100%.

Motor Vehicle Deaths by States, 1948-49

Source: National Safety Council

State	1948	Rate ¹	1949	Rate ¹	State	1948	Rate ¹	1949	Rate ¹
Alabama.....	697	12.2	687	11.1	Nebraska.....	269	6.0	256	5.7
Arizona.....	301	11.7	281	10.7	Nevada.....	97	11.9	82	9.6
Arkansas.....	412	10.5	393	9.3	New Hampshire.....	91	6.1	72	4.6
California.....	2,932	7.9	3,003	7.7	New Jersey.....	597	4.5	592	4.1
Colorado.....	344	8.5	318	7.3	New Mexico.....	254	11.3	245	10.1
Connecticut.....	255	4.6	199	3.4	New York.....	1,805	6.5	1,904	6.3
Delaware.....	81	8.3	81	7.5	North Carolina.....	734	7.9	843	8.4
D. C.....	52	2.4	64	2.7	North Dakota.....	109	6.5	134	8.6
Florida.....	702	9.1	680	8.1	Ohio.....	1,856	8.0	1,712	7.0
Georgia.....	782	10.3	738	8.9	Oklahoma.....	510	8.3	518	7.9
Idaho.....	203	10.1	168	7.9	Oregon.....	419	7.7	355	6.3
Illinois.....	1,939	8.4	1,791	7.6	Pennsylvania.....	1,671	7.0	1,607	6.4
Indiana.....	1,071	9.0	1,121	8.7	Rhode Island.....	54	2.9	58	3.0
Iowa.....	565	6.9	551	6.4	South Carolina.....	521	11.4	548	11.0
Kansas.....	489	8.2	497	8.0	South Dakota.....	140	6.5	134	6.6
Kentucky.....	512	8.4	613	9.3	Tennessee.....	660	9.3	676	9.0
Louisiana.....	524 ²	9.8	517 ²	8.9	Texas.....	2,059	8.4	1,957	7.3
Maine.....	181	7.1	160	6.0	Utah.....	220	10.3	174	7.7
Maryland.....	401	7.6	462	8.1	Vermont.....	85	7.6	63	5.4
Massachusetts.....	445	4.2	471	4.2	Virginia.....	730	9.0	810	9.1
Michigan.....	1,512	7.9	1,436	7.2	Washington.....	503	6.9	441	5.8
Minnesota.....	552	6.5	538	5.9	West Virginia.....	406	9.6	356	8.1
Mississippi.....	419	9.5	386	8.0	Wisconsin.....	822	8.5	749	7.5
Missouri.....	818	7.1	797	6.4	Wyoming.....	145	11.2	137	10.4
Montana.....	164	8.2	162	7.6	Total U. S. ³	32,259	....	31,500	....

¹ Number of deaths per 100,000,000 vehicle miles. ² From state health authorities. ³ Totals are not sums of state figures. NOTE: Figures are per state traffic authorities and indicate place of accident rather than of death.

Transportation Accident Death Rates, 1947-49

Source: National Safety Council.

Kind of transportation	Passenger mileage, in millions	Passenger deaths		All deaths ²			
		Deaths, 1949	Rates ¹		Deaths, 1949	Rates ¹	
			1949	1947-49 ²		1949	1947-49 ²
Passenger automobiles, taxis ⁴	750,000	15,300	2.0	2.2	24,500	3.3	3.6
Busses.....	61,000	120	0.20	0.20	710	1.2	1.3
Railroad passenger trains.....	35,100	29	0.08	0.13	1,421	4.0	4.0
Scheduled transport planes.....	7,072	93	1.3	1.9	106	1.5	2.1

¹ Per 100 million miles. ² Average annual death rate. ³ All persons—pedestrians, trespassers and others, as well as passengers—killed in operation of vehicles are included. ⁴ Drivers of passenger automobiles are considered passengers.

Change in Classification of Accidental Deaths

Since about 1900, the classification of deaths according to cause has been standardized by agreement among most countries. These classifications have been revised about once every 10 years, but usually the revisions have been small enough to permit historical comparisons for different types of accidental deaths.

The most recent revision (the sixth) became effective in 1949. It differs so greatly from earlier classifications that adjustment must be made for comparability between 1948 and 1949. Therefore, it

is necessary to list two figures for 1948 in historical tables of accidental deaths. The first is comparable with figures for earlier years; the second, with figures for 1949.

The outstanding change is the decrease of 4,000 in the all-accident total. Before 1949, deaths following accidental injury were almost invariably classified as due to the accident. Currently, the underlying cause of death, as stated by the physician, is selected; and this cause may be a chronic disease, particularly in older persons.

Motor Vehicle Deaths in Largest U. S. Cities, 1948-49

Source: National Safety Council.

City	Number 1948 ¹	Number 1949 ¹	Pop. rate 1949 ²	Regis. rate 1949 ³	City	Number 1948 ¹	Number 1949 ¹	Pop. rate 1949 ²	Regis. rate 1949 ³
Baltimore, Md.	77	84	9.1	4.1	Memphis, Tenn.	37	30	8.8	3.6
Boston, Mass.	63	56	6.7	4.2	Milwaukee, Wis.	43	49	7.8	3.2
Buffalo, N. Y.	51	46	7.2	3.0	Minneapolis, Minn.	54	39	7.3	2.3
Chicago, Ill.	478	412	11.0	5.6	New Orleans, La.	55	40	7.4	4.0
Cincinnati, Ohio	71	44	9.2	3.1	New York, N. Y.	557	563	7.6	5.2
Cleveland, Ohio	96	89	9.1	3.2	Newark, N. J.	39	32	7.4	3.2
Columbus, Ohio	50	38	11.3	3.2	Oakland, Calif.	48	40	10.0	3.1
Dallas, Texas	48	37	10.0	2.4	Philadelphia, Pa.	148	153	7.5	4.5
Denver, Colo.	47	50	12.6	3.7	Pittsburgh, Pa.	84	69	10.3	5.0
Detroit, Mich.	208	183	10.4	3.2	St. Louis, Mo.	94	80	9.8	3.5
Houston, Texas	62	51	12.6	2.9	San Antonio, Texas	60	45	10.9	4.1
Kansas City, Mo.	42	25	6.0	2.0	San Francisco, Calif.	88	53	6.4	2.3
Los Angeles, Calif.	280	259	14.3	3.3	Seattle, Wash.	65	54	11.3	2.9
Louisville, Ky.	49	40	11.3	4.5	Washington, D. C.	52	64	7.4	3.8

¹ Only motor-vehicle traffic deaths resulting from accidents occurring within the city are included. ² Deaths per 100,000 population. ³ Deaths per 10,000 registered motor vehicles. Registration figures supplied by R. L. Polk & Co.

Deaths in Steam Railway Accidents, 1918 to 1949

Source: National Safety Council.

Year	Passen- gers on trains*	Travelers not on trains*	Employees on duty	Persons in grade crossing accidents	Other non-tres- passers†	Tres- passers	Total‡
1918.		521§	3,566	1,979	501	3,423	9,994
1923.		149§	2,134	2,422	370	2,861	7,795
1928.		104§	1,357	2,768	363	2,532	7,002
1933.	47	13	571	1,638	179	3,025	5,434
1938.	79	9	549	1,679	190	2,428	4,879
1943.	271	13	1,089	1,876	326	1,788	5,302
1945.	145	13	987	2,074	220	1,616	5,055
1946.	115	17	736	2,025	201	1,618	4,712
1947.	75	12	789	1,924	193	1,459	4,452
1948.	52	13	639	1,742	174	1,440	4,060
1949.	29	8	443	1,609	149	1,292	3,530

* Persons on or getting on or off passenger-carrying trains under conditions not constituting trespass are designated as "passengers on trains." Other persons lawfully on railway premises in connection with their journeys by railways are designated as "travelers not on trains." † Death totals in this column exclude subsequent fatalities due to lack of information. ‡ The sum of the items in the preceding columns exceeds the figure in the "Total" column because of duplication; e.g., employees killed in grade crossing accidents. § Deaths to passengers on trains and travelers not on trains are combined.

Principal Types of Accidental Deaths, 1913 to 1949

Source: National Safety Council.

Year	Motor vehicle	Falls	All burns*	Drown- ing	Rail- road	Fire- arms	Poison gases	Poisons (except gas)	All types
1913.	4,200	18,700	9,350	10,000	12,500	2,400	3,550	3,200	82,500
1918.	10,700	16,700	10,700	7,350	10,500	2,700	4,400	2,650	85,100
1923.	18,400	16,800	9,550	7,000	8,100	2,950	2,800	2,950	84,400
1928.	28,000	19,600	9,000	8,750	7,150	3,000	2,800	2,850	95,000
1933.	31,363	21,746	7,341	7,465	5,410	3,026	1,668	2,334	90,932
1938.	32,582	25,454	7,145	7,347	4,868	2,696	1,459	2,196	93,805
1943.	23,823	28,000	10,450	7,710	5,231	2,318	2,110	1,890	99,038
1945.	28,076	26,580	9,170	7,030	5,023	2,454	2,200	2,100	95,918
1946.	33,411	25,650	8,790	6,940	4,640	2,816	1,930	2,050	98,033
1947.	32,697	26,950	8,940	7,260	4,399	2,386	2,000	1,960	99,579
1948 (5th Revision).	32,259	24,800	7,668	6,500	3,976	2,270	2,002	1,713	98,001
1948 (6th Revision).	32,259	21,300	7,150	6,500	3,800	2,330	2,020	1,600	94,000
1949.	31,500	21,300	6,500	6,700	3,300	2,350	1,800	1,600	91,000

* Includes burns by fire and deaths directly resulting from conflagration, regardless of nature of injury; also burns by chemicals, steam, or any other hot substance in 1948 (5th Revision) and earlier years.

Crude Birth and Death Rates of the World

(Number of births and deaths per 1,000 inhabitants, excluding stillbirths)

Source: Statistical Office of the United Nations.

Country	1939		1946		1947		1948		1949	
	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths
Australia.....	17.6	9.9	23.6	10.1	24.1	9.7	23.1	10.0	22.9	9.5
Austria.....	20.7	15.3 ¹	15.9	13.4	18.6	13.0	17.7	12.1	15.8	12.6
Belgium.....	15.5	13.9	18.3	13.6	17.8	13.3	17.6	12.6	17.2	12.9
Bulgaria.....	21.4	13.4	25.6 ²	13.7 ²	24.0 ²	13.4 ²	.....	.....	.....	.....
Canada ³	20.4	9.7	26.9	9.4	28.6	9.4	27.0	9.3	26.9	9.2
Ceylon.....	36.0	21.8	38.4	20.3	39.4	14.3	40.5	13.2	39.9	12.6
Chile.....	33.3	23.3	32.4	17.2	33.8	16.7	33.7	17.4	33.2	18.1
Costa Rica.....	42.8	18.5	42.4	13.1	53.6	13.9	41.3	12.2	41.0	11.8
Czechoslovakia.....	18.6	13.3	22.5	13.8	23.8	12.0	23.3	11.5	.....	.....
Denmark.....	17.8	10.1	23.4	10.2	22.1	9.7	20.3	8.6	18.9	8.9
El Salvador.....	41.6	18.3	36.1	15.5	41.2	15.0	38.5	14.5	39.5	13.2
Finland.....	21.2	14.7	27.7	12.0	27.8	12.0 ⁴	27.2	11.1 ⁴	25.7	11.3 ⁴
France.....	14.8	15.6	20.9	13.5	21.3	13.2	21.2	12.3	21.0	14.2
Germany: Br. Zone.....	20.6	11.8 ¹	16.2	12.3	15.7	11.3	15.9	9.5	.....	.....
Fr. Zone.....	20.5 ²	11.9 ^{4,7}	14.3	13.1	15.4	12.8	16.3 ⁸	11.7 ⁸	.....	.....
Hungary.....	19.4	13.5	18.1	14.5	18.4	12.1	19.1	11.2	.....	.....
India ⁹	32.7	21.6	28.8 ¹⁰	18.7 ¹⁰	26.6	19.7	25.5	17.2	.....	.....
Ireland.....	19.1	14.2	22.9	14.0	23.2	14.9	22.0	12.1	21.4	12.7
Italy.....	23.6	13.4	22.7	12.1	21.9	11.4	21.6	10.6	20.0	10.4
Japan ¹¹	26.6	17.8	25.3	17.6	34.3	14.6	33.4	11.9	33.2	11.6
Luxemburg.....	15.0	12.7	15.3	12.6	14.8	12.5	14.7	11.7	.....	.....
Mexico.....	44.6	28.0	43.7	19.4	45.1	16.3	44.1	16.3	.....	.....
Netherlands.....	20.6	8.6	30.2	8.5	27.8	8.1	25.3	7.4	23.7	8.1
New Zealand ¹²	18.7	9.2	25.2	9.7 ¹³	26.4	9.4 ¹³	25.5	9.1 ¹³	24.9	9.1 ¹³
Nicaragua.....	32.5	11.9	34.7	10.8	34.9	10.9	.....	.....	.....	.....
Norway.....	15.9	10.2	22.6	9.2	21.6	9.3	20.5	8.9	19.6	8.8
Panamá ¹⁴	27.9	11.4	37.8	11.0	34.7	9.1	33.6	8.1	33.0	7.1
Peru ¹⁴.....	.....	.....	27.9	12.6	27.4	11.2	27.8	10.5	.....	.....
Portugal.....	26.2	15.3	25.0	14.7	24.1	13.3	26.3	12.8	25.0	13.8
Puerto Rico.....	39.6	17.7	42.1	13.2 ¹⁵	42.6	11.9 ¹⁵	40.3	12.0 ¹⁵	39.1	10.7 ¹⁵
Rumania.....	28.3	18.6	23.8	18.0	22.4	21.1	.....	.....	.....	.....
South Africa, U. of ¹⁶	25.3	9.4	26.9	8.7 ⁴	27.2	8.6 ⁴	27.5	8.9 ⁴	26.7	9.1 ⁴
Spain.....	16.6	18.5	21.4	12.9	21.3	12.0	23.0	10.9	21.4	11.4
Sweden.....	15.4	11.5	19.6	10.5	18.9	10.8	18.4	9.8	17.4	10.0
Switzerland.....	15.2	11.8	20.0	11.3	19.3	11.3	19.0	10.8	18.4	10.7
United Kingdom.....	15.2	12.2 ¹³	19.4	11.7 ¹³	20.8	12.1 ¹³	18.1	10.9 ¹³	17.6	11.7 ¹³
United States.....	17.3	10.6	23.3	10.0 ¹³	25.7	10.1 ¹³	24.1 ¹⁴	9.9 ¹³	24.0 ¹⁴	9.7 ¹³
Venezuela ¹⁴	35.9	18.7	38.4	15.0	39.5	13.9	40.8	13.3	43.3	12.5

¹ Excluding deaths among armed forces. ² Including southern Dobruja. ³ Excluding Yukon and Northwest Territories. ⁴ Excluding deaths among armed forces overseas but computed on total population. ⁵ Excluding "declared dead." ⁶ Excluding infants born alive but who die before registration of birth. ⁷ Excluding districts of Sarreburg and Lindau. ⁸ Excluding Saar territory. ⁹ 1939-46, registration area of former British provinces; 1947, registration area of Union of India. ¹⁰ Excluding East Bengal. ¹¹ Japanese nationals only in 4 principal islands. ¹² Excluding Maoris. ¹³ Excluding deaths among armed forces overseas. ¹⁴ Excluding jungle population. ¹⁵ European population only. ¹⁶ Based on estimates of population excluding armed forces overseas.

Census Divisions of the U. S.

New England States: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

Middle Atlantic States: New York, New Jersey, Pennsylvania.

East North Central States: Ohio, Indiana, Illinois, Michigan, Wisconsin.

West North Central States: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

South Atlantic States: Delaware, Maryland, District of Columbia*, Virginia, West

Virginia, North Carolina, South Carolina, Georgia, Florida.

East South Central States: Kentucky, Tennessee, Alabama, Mississippi.

West South Central States: Arkansas, Louisiana, Oklahoma, Texas.

Mountain States: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada.

Pacific States: Washington, Oregon, California.

* Counted as a state for census purposes.

World Life Expectancy

Country	Years	Sex	Average future lifetime in years at age of									
			0	1	10	20	30	40	50	60	70	
Australia.....	1932-34	M	63.48	65.49	58.02	48.81	39.90	31.11	22.83	15.57	9.60	
		F	67.14	68.67	61.02	51.67	42.77	34.04	25.58	17.74	10.98	
Austria.....	1930-33	M	54.47	60.55	54.08	45.18	36.86	28.65	20.96	14.15	8.59	
		F	58.53	63.46	56.96	48.03	39.59	31.13	22.94	15.42	9.21	
Belgium.....	1928-32	M	56.02	61.25	54.88	46.04	37.78	29.48	21.61	14.53	8.69	
		F	59.79	63.84	57.25	48.43	40.17	31.77	23.55	15.93	9.60	
Brazil.....	1920	Both	37.43	45.26	44.28	36.33	30.34	24.36	18.61	13.33	8.76	
Bulgaria.....	1925-28	M	45.92	54.37	53.75	45.78	38.45	30.70	23.23	16.45	10.88	
		F	46.64	53.73	53.20	45.45	38.97	31.73	24.32	17.18	11.05	
Canada.....	1940-42	M	62.95	66.14	58.70	49.57	40.73	31.87	23.49	16.06	9.94	
		F	66.29	68.73	61.08	51.76	42.81	33.99	25.46	17.62	10.93	
China.....	1936-40	M	41.08	47.61	45.62	37.15	29.68	22.66	16.50	11.28	7.09	
		F	45.73	51.46	50.78	42.37	34.83	27.70	20.65	14.18	8.74	
Czechoslovakia.....	1929-32	M	51.92	59.90	54.04	45.29	37.15	28.96	21.24	14.35	8.67	
		F	55.18	61.96	56.10	47.40	39.24	30.98	22.83	15.35	9.24	
Denmark.....	1941-45	M	65.62	68.43	60.46	51.12	42.20	33.16	24.51	16.69	10.13	
		F	67.70	69.63	61.52	52.03	42.91	33.88	25.16	17.14	10.38	
Egypt.....	1936-38	M	35.65	42.09	46.86	39.77	32.96	26.12	19.42	13.29	7.88	
		F	41.48	48.14	54.47	46.11	38.23	30.82	23.43	16.26	9.55	
England and Wales.....	1937	M	60.18	63.33	56.25	47.10	38.32	29.57	21.40	14.32	8.58	
		F	64.40	66.79	59.59	50.40	41.60	32.78	24.28	16.48	9.97	
Finland.....	1941-45	M	54.62	57.68	51.27	42.90	35.36	27.52	20.16	13.78	8.80	
		F	61.14	63.84	57.42	48.91	40.96	32.68	24.41	16.58	10.03	
France.....	1933-38	M	55.94	59.52	52.57	43.62	35.52	27.71	20.43	13.92	8.50	
		F	61.64	64.50	57.50	48.64	40.46	32.10	24.01	16.50	10.06	
Germany.....	1932-34	M	59.86	64.43	57.28	48.16	39.47	30.83	22.54	15.11	9.05	
		F	62.81	66.41	59.09	49.84	41.05	32.33	23.85	16.07	9.58	
Greece.....	1926-30	M	49.09	53.22	52.40	44.31	37.07	29.76	22.58	16.03	10.57	
		F	50.89	55.09	54.48	46.43	39.45	32.40	24.93	17.49	10.99	
Hungary.....	1941	M	54.92	61.75	55.27	46.65	38.58	30.14	22.15	15.00	8.97	
		F	58.22	64.00	57.32	48.73	40.57	32.12	23.76	16.03	9.52	
India.....	1921-31	M	26.91	34.68	36.38	29.57	23.60	18.60	14.31	10.25	6.35	
		F	26.56	33.48	33.61	27.08	22.30	18.23	14.65	10.81	6.74	
Ireland.....	1940-42	M	59.01	63.23	56.25	47.24	38.92	30.58	22.53	15.37	9.60	
		F	61.02	64.16	56.94	48.04	39.89	31.63	23.54	16.31	10.42	
Italy.....	1930-32	M	53.76	59.71	55.46	46.75	38.53	30.39	22.45	15.16	9.05	
		F	56.00	61.32	57.15	48.49	40.41	32.14	23.89	16.13	9.61	
Japan.....	1935-36	M	46.92	51.95	48.25	40.41	33.89	26.22	18.85	12.55	7.62	
		F	49.63	54.07	50.47	43.22	36.88	29.65	22.15	15.07	9.04	
Mexico.....	1929-33	Both	.....	.....	42.50	36.20	29.80	23.50	17.60	12.30	8.00	
Netherlands.....	1931-40	M	65.70	67.80	60.30	51.00	41.90	32.90	24.10	16.30	9.80	
		F	67.20	68.60	60.80	51.50	42.30	33.30	24.70	16.80	10.20	
New Zealand.....	1934-38	M	65.46	66.92	59.11	49.89	40.94	32.03	23.64	16.06	9.82	
		F	68.45	69.46	61.45	52.02	42.98	34.05	25.47	17.49	10.73	
Northern Ireland*.....	1936-38	M	57.80	.....	55.40	46.40	33.60	25.40	18.00	11.60	7.00	
		F	59.20	.....	56.10	47.10	34.60	26.40	18.80	12.40	7.60	
Norway.....	1921-31	M	60.98	63.51	56.27	47.73	40.39	32.40	24.41	16.37	10.63	
		F	63.84	65.76	58.35	49.85	42.14	34.00	25.87	18.16	11.40	
Poland.....	1931-32	M	48.20	56.90	52.20	43.70	36.00	27.90	20.30	13.70	8.30	
		F	51.40	58.70	54.00	45.70	38.00	30.30	22.40	15.10	9.20	
Portugal.....	1939-42	M	48.58	56.21	52.61	44.00	36.04	28.23	20.76	13.86	8.19	
		F	52.82	59.23	56.86	48.35	40.35	32.17	23.98	16.20	9.59	
Scotland.....	1930-32	M	56.00	60.70	54.90	46.00	37.40	29.10	21.30	14.10	8.40	
		F	59.50	63.10	57.20	48.30	39.80	31.40	23.30	15.90	9.60	
South Africa (White only).....	1935-37	M	58.95	62.12	55.43	46.43	37.93	29.45	21.70	14.97	9.34	
		F	63.06	65.60	58.87	49.72	40.98	32.44	24.30	16.82	10.50	
Spain.....	1930-31	M	48.74	54.54	51.54	43.16	35.35	27.51	19.97	13.20	7.78	
		F	51.94	57.23	54.46	46.12	38.32	30.33	22.38	14.93	8.83	
Sweden.....	1941-45	M	67.06	68.43	60.45	51.23	42.57	33.64	25.02	17.19	10.52	
		F	69.71	70.58	62.40	53.02	44.01	34.97	26.20	18.01	11.00	
Switzerland.....	1939-44	M	62.68	64.75	57.08	47.92	39.26	30.42	22.08	14.75	8.85	
		F	66.96	68.46	60.62	51.28	42.32	33.35	24.63	16.65	9.97	
U.S.S.R. (European).....	1926-27	M	41.93	51.40	51.65	43.24	35.65	28.02	20.99	14.85	9.65	
		F	46.79	55.46	55.72	47.36	39.75	32.12	24.41	17.07	10.96	
United States.....	1939-41	M	61.60	64.00	56.12	46.91	38.13	29.57	21.72	14.99	9.46	
		F	65.89	67.73	59.73	50.37	41.41	32.68	24.40	16.92	10.56	

* Uses 35, 45, 55, 65 and 75 years as bases after 20.

Marriage Information, by State

Sources: Questionnaires to states; and Federal Security Agency, Public Health Service.

State	Legal minimum marriage age				Blood test required	Waiting period		Number of marriages, 1949 ²	Rates ¹	
	With parental consent		Without parental consent			Before license	After license		1948 ³	1949 ²
	M	F	M	F						
Alabama.....	17	14	21	18	yes	none	none	19,664	7.2	6.7
Arizona.....	18	16	21	18	no	none	none	23,139	35.3 ⁴	31.1
Arkansas.....	18	16	21	18	no	3 da.	none	44,534 ⁴	22.5 ⁴	22.7 ⁴
California.....	18	16	21	18	yes	3 da.	none	77,961	8.5	7.3
Colorado.....	16	16	21	18	yes	none	none	12,639 ⁴	11.7 ⁴	10.4 ⁴
Connecticut.....	16	16	21	21	yes	5 da.	none	18,292	10.9	9.1
Delaware.....	18	16	21	18	yes	none	24 hr. ⁵	2,693 ⁴	8.9	8.7 ⁴
D. C.....	18	16	21	18	no	3 da.	none	9,991 ⁴	13.4 ⁴	11.5 ⁴
Florida.....	18	16	21	21	yes	3 da.	none	22,039	8.9	8.8
Georgia.....	17	14	21	18	yes	none	none	53,882 ⁴	21.5 ⁴	16.9 ⁴
Idaho.....	15	15 ⁵	18	18	yes	none	none	7,566	14.3	12.8
Illinois.....	18	16	21	18	yes	none	none	90,920 ⁴	12.1 ⁴	10.8 ⁴
Indiana.....	18	16	21	18	yes	none	none	48,282 ⁴	13.9 ⁴	12.1 ⁴
Iowa.....	16	14	21	18	yes	none	none	25,279	10.9	9.6
Kansas.....	18	16	21	18	yes	3 da.	none	17,822	10.7	9.2
Kentucky.....	16	14	21	21	yes	none	none	58,621 ⁴	22.5 ⁴	20.3 ⁴
Louisiana.....	18	16	21	21	(?)	none	72 hr.	25,711 ⁴	11.2 ⁸	9.8 ⁴
Maine.....	16	16	21	18	yes	5 da.	none	8,396	11.5	9.2
Maryland.....	18	16	21	18	no	48 hr.	none	47,842 ⁴	26.1 ⁴	22.0 ⁴
Massachusetts.....	18	16	21	18	yes	5 da.	none	41,000 ⁸	9.9	8.7 ⁸
Michigan.....	18	16	18	18	yes	5 da.	none	53,109	10.0	8.4
Minnesota.....	16	15	18	16	no	5 da.	none	28,659 ⁴	11.3 ⁴	9.6 ⁴
Mississippi.....	14	12	21	18	no	none	none	52,475	25.4	24.6
Missouri.....	15	15	21	18	yes	3 da.	none	37,113	10.9 ⁴	9.4
Montana.....	18	16	21	18	yes	none	none	7,067	14.0	13.6
Nebraska.....	18	16	21	21	yes	none	none	12,743	11.6	9.9
Nevada.....	18	16	21	18	no	none	none	45,155 ⁴	319.3 ⁴	259.5 ⁴
New Hampshire.....	14	13	21	18	yes	5 da.	none	7,299	16.1	13.4
New Jersey.....	18	18	21	18	yes	72 hr.	none	44,391	10.9	9.1
New Mexico.....	18	16	21	18	no	none	none	16,794 ⁴	28.9	28.5 ⁴
New York.....	16	14	21	18	yes	none	24 hr.	136,847	11.0	9.5
North Carolina.....	16	16	18	18	yes	48 hr. ⁹	none	27,275 ⁴	7.8 ⁴	7.1 ⁴
North Dakota.....	18	15	21	18	yes	none	none	4,800	9.4	7.9
Ohio.....	18	16	21	21	yes	5 da.	none	59,600 ⁸	10.6 ⁴	7.5 ⁸
Oklahoma.....	18	15	21	18	yes	3 da.	none	18,486 ⁴	9.0 ⁴	8.0 ⁴
Oregon.....	18	15	21	18	yes	3 da.	none	10,751	7.5	6.2
Pennsylvania.....	16	16	21	21	yes	3 da.	none	82,479	9.4	7.8
Rhode Island.....	18	16	21	21	yes	5 da.	none	7,089	11.7	9.5
South Carolina.....	18	14	18	18	no	24 hr.	none	39,509 ⁴	23.6 ⁴	19.7 ⁴
South Dakota.....	18	15	21	18	yes	none	none	6,472	12.0	10.0
Tennessee.....	16	16	21	21	yes	3 da. ¹³	none	14,475	4.8	4.5
Texas.....	16	14	21	18	(?)	none	none	96,214 ⁴	15.3 ⁴	12.8 ⁴
Utah.....	16	14	21	18	yes	none	none	6,402 ⁴	10.9	9.4 ⁴
Vermont.....	18	16	21	18	yes	none	5 da.	3,367	10.7	9.1
Virginia.....	18	16	21	21	yes	none	none	33,273 ⁴	12.3	10.7 ⁴
Washington.....	15	15	21	18	no	3 da.	none	32,374 ⁴	14.2 ⁴	12.5 ⁴
West Virginia.....	18	16	21	21	yes	3 da.	none	13,739 ⁴	8.6 ⁴	7.1 ⁴
Wisconsin.....	18	15	21	18	yes	5 da.	none	27,801	9.9	8.3
Wyoming.....	18	16	21	18	yes	none	none	3,409	13.1	12.0

¹ Per 1,000 estimated total midyear population present in area. ² By place of occurrence; figures provisional. ³ By place of occurrence; figures revised. ⁴ Marriage licenses. ⁵ 96 hr. if nonresidents. ⁶ If under 15, order must be obtained from Probate Court. ⁷ For males only. ⁸ Estimated. ⁹ In 6 counties. ¹⁰ Except by court order or known by judge to be over 21.

Only 4 states reported more marriages in 1949 than in 1948—Arkansas, Delaware, Florida and New Mexico. New York had the largest number of marriages for 1947–49; Wyoming, the smallest for 1947; and Delaware, the smallest for 1948 and 1949.

The extreme variation in the marriage rates between states can be explained in terms of the enumeration of marriages by place of occurrence. Sharp revisions in rates would undoubtedly result from the allocation of marriage to a residence basis.

Marital Status of the Population, 1940

(15 years old and over)

Source: U. S. Bureau of the Census.

State	Single*		Married		Widowed		Divorced	
	Male	Female	Male	Female	Male	Female	Male	Female
Alabama.....	291,246	232,468	603,014	609,036	36,637	124,988	6,936	12,478
Arizona.....	59,602	34,974	108,813	107,277	7,817	18,600	4,146	4,098
Arkansas.....	199,300	137,052	438,087	437,562	32,280	81,981	8,054	10,956
California.....	918,978	570,269	1,701,632	1,679,001	114,276	360,840	86,012	109,078
Colorado.....	132,778	92,675	261,748	260,043	20,096	49,661	8,547	9,765
Connecticut.....	240,788	214,005	390,950	389,206	28,537	71,570	4,750	6,729
Delaware.....	34,979	26,865	62,504	62,332	5,141	12,120	900	1,152
D. C.....	90,495	85,052	154,108	155,834	9,636	38,468	4,037	7,276
Florida.....	206,116	145,365	452,394	453,226	33,501	103,144	11,244	16,895
Georgia.....	330,589	266,822	671,341	679,028	41,895	154,322	8,176	14,363
Idaho.....	67,778	36,638	120,777	119,132	7,676	15,690	3,984	3,044
Illinois.....	1,013,928	803,776	1,892,349	1,884,288	139,070	355,305	43,516	57,008
Indiana.....	385,364	290,237	837,496	831,880	63,246	149,656	21,241	26,128
Iowa.....	309,801	238,801	596,167	593,452	43,472	103,351	13,372	16,002
Kansas.....	209,707	160,372	430,354	427,379	31,499	79,161	10,921	12,170
Kentucky.....	316,292	237,071	626,343	621,185	42,709	111,637	11,522	14,819
Louisiana.....	259,400	199,905	518,257	525,295	33,893	106,649	6,809	11,233
Maine.....	102,525	80,590	188,551	187,838	17,290	37,650	5,237	6,238
Maryland.....	239,221	182,883	419,021	418,094	30,552	81,796	6,705	9,125
Massachusetts.....	598,247	594,478	934,173	933,261	77,181	202,340	14,677	21,908
Michigan.....	652,094	453,648	1,254,575	1,238,505	85,063	188,627	33,547	35,891
Minnesota.....	408,015	303,569	610,648	606,429	45,242	102,954	11,571	14,721
Mississippi.....	217,339	164,617	472,066	476,379	30,495	94,849	5,726	9,794
Missouri.....	429,984	341,598	910,812	910,728	68,918	185,077	21,908	29,996
Montana.....	86,219	44,251	125,964	123,692	9,734	19,013	4,907	3,781
Nebraska.....	163,643	125,067	304,686	303,781	21,804	51,187	6,478	7,657
Nevada.....	17,889	6,208	26,992	25,510	1,856	3,622	2,013	1,311
New Hampshire.....	61,971	53,017	110,835	110,555	10,579	23,217	3,027	3,426
New Jersey.....	562,640	479,217	981,976	979,936	70,657	186,602	9,547	14,828
New Mexico.....	58,365	39,559	110,562	109,765	8,098	16,450	2,443	2,984
New York.....	1,861,537	1,598,119	3,157,750	3,149,635	226,595	625,031	31,424	51,755
North Carolina.....	408,975	343,946	731,906	737,836	39,354	130,957	6,366	11,064
North Dakota.....	98,930	64,338	128,974	128,291	9,218	17,813	1,793	1,988
Ohio.....	832,054	670,983	1,662,583	1,647,217	122,948	297,646	41,662	53,659
Oklahoma.....	246,312	171,037	536,897	533,799	36,548	93,473	15,188	20,297
Oregon.....	139,949	85,121	272,700	269,369	19,708	47,160	12,504	11,868
Pennsylvania.....	1,330,989	1,119,812	2,207,727	2,201,633	173,763	414,612	23,994	32,064
Rhode Island.....	98,973	94,789	155,316	155,763	12,281	31,552	2,620	4,258
South Carolina.....	210,968	177,937	378,717	384,446	20,913	80,995	1,848	3,299
South Dakota.....	90,923	61,205	138,578	137,808	10,017	20,752	2,539	2,715
Tennessee.....	310,391	249,825	648,394	650,230	42,492	130,028	10,904	17,579
Texas.....	699,956	502,692	1,481,163	1,476,836	95,282	272,819	36,222	53,286
Utah.....	62,174	45,330	119,795	119,555	5,826	18,368	2,749	3,542
Vermont.....	46,734	34,267	78,948	78,403	7,447	16,958	1,916	2,025
Virginia.....	341,510	254,055	573,724	572,299	37,348	111,782	8,348	11,870
Washington.....	244,035	138,440	424,749	418,969	31,920	74,409	18,658	18,484
West Virginia.....	226,183	164,932	409,892	406,304	24,814	60,687	6,393	8,447
Wisconsin.....	423,760	316,735	707,719	702,248	54,530	117,556	15,203	17,604
Wyoming.....	36,944	17,160	58,360	56,865	3,698	6,967	2,154	1,875
1940 totals.....	16,376,595	12,751,772	30,191,087	30,087,135	2,143,552	5,700,092	624,398	822,563
% of each sex.....	33.2	25.8	61.2	61.0	4.3	11.5	1.3	1.7
1940 urban.....	9,218,434	8,256,093	17,488,846	17,535,268	1,195,146	3,742,439	410,037	632,292
% of each sex.....	32.6	27.4	61.8	61.1	4.2	12.4	1.4	2.1
1940 rural-nonfarm.....	3,129,750	2,164,104	6,250,430	6,185,943	456,080	1,113,076	129,197	127,600
% of each sex.....	31.4	22.6	62.7	64.5	4.6	11.6	1.3	1.3
1940 rural-farm.....	4,028,411	2,331,575	6,451,811	6,365,924	492,326	844,577	85,164	62,671
% of each sex.....	36.4	24.3	58.3	66.3	4.5	8.8	.8	.6
1890 totals.....	8,708,130	6,250,912	11,205,205	11,124,785	815,437	2,154,598	49,100	71,883
1900 totals.....	10,402,543	7,606,772	13,955,650	13,810,975	1,177,976	2,717,715	84,230	114,647
1910 totals.....	12,705,653	9,001,342	18,092,600	17,684,687	1,471,390	3,176,228	156,162	185,068
1920 totals.....	13,077,805	9,667,653	21,849,266	21,318,933	1,758,308	3,917,625	235,284	273,304
1930 totals.....	15,039,398	11,359,038	26,327,109	26,170,756	2,025,036	4,734,207	489,478	573,148

* Includes persons of unknown marital status.

Grounds for Divorce

Source: Questionnaires to the states.

State	Adultery	Cruelty	Desertion	Alcoholism	Impotence	Felony conviction	Neglect to provide	Insanity	Pregnancy at marriage ¹	Bigamy	Separation	Indignities	Drug addiction	Violence	Fraudulent contract	Others
Alabama	yes	yes	yes ²	yes	yes	yes	yes ³	yes ⁴	yes	...	...	...	yes	...	...	...
Arizona	yes	yes	yes	yes	yes	yes ⁶	yes	...	yes	yes	yes ⁴	yes	yes	yes	yes	(5, 2-13)
Arkansas	yes	yes	yes ²	yes	yes	yes	...	...	...	yes	yes ¹⁴	yes	yes	yes	yes	(12, 15, 16)
California	yes	yes	yes	...	...	yes	yes	yes ¹⁴	...	...	...	...	...	...	...	(17)
Colorado	yes	yes	yes ²	yes	yes	yes	yes	yes ⁴	...	yes	yes ²	...	yes	yes	...	(7)
Connecticut	yes	yes	yes ¹⁴	...	...	yes ¹⁸	...	yes ⁴	...	...	...	...	...	...	yes	(10, 17, 19)
Delaware	yes	yes	yes ³	yes ³	...	yes ²⁰	yes	yes ⁴	...	yes	...	...	...	...	...	(21-23)
D. C.	yes	...	yes ³	...	...	yes	...	...	...	...	yes ⁴	...	...	...	...	...
Florida	yes	yes	yes ²	...	yes	...	...	...	...	yes	...	...	...	yes	...	(12, 17, 24)
Georgia	yes	yes	yes ²	yes	yes	yes ²⁰	...	...	yes	...	...	...	...	...	yes	(12, 14)
Idaho	yes	yes	yes	yes	...	yes	...	yes	...	yes	...	yes	...	yes	...	(8, 9, 25)
Illinois	yes	yes	yes ²	yes ³	yes	yes	...	...	...	yes	...	...	...	...	...	(10, 26, 27)
Indiana	yes	yes	yes ³	yes	yes	...	yes ³	yes ⁴	...	...	...	...	...	...	...	(10)
Iowa	yes	yes	yes ³	yes	...	yes	...	...	yes	...	...	...	...	...	...	...
Kansas	yes	yes	yes ²	yes	yes	yes	...	yes ⁴	yes	yes	...	...	...	...	yes	(12, 16)
Kentucky	yes	yes	yes	yes	yes	yes	...	yes ⁴	yes	...	yes ⁴	...	...	yes	yes	(11, 28, 29)
Louisiana	yes	yes	yes	...	...	yes	...	...	...	...	yes ²	...	...	...	...	(28, 30)
Maine	yes	yes	yes	yes	yes	yes ¹⁸	yes	...	...	yes	...	yes	yes	...	...	(15)
Maryland	yes	...	yes ³¹	...	yes	yes ³²	...	yes ¹⁴	...	...	yes ¹⁴	...	...	...	...	(22)
Massachusetts	yes	yes	yes ¹⁵	yes	...	yes ³⁴	yes	...	...	...	...	...	yes	...	...	(24)
Michigan	yes	yes	yes ³	yes	yes	yes ³⁵	yes	...	...	...	...	...	...	...	...	...
Minnesota	yes	yes	yes ²	yes	yes	yes	...	yes ⁴	...	...	yes ³	...	...	...	...	...
Mississippi	yes	yes	yes	yes	yes	yes	yes	yes ¹⁵	yes	yes	yes ²	...	yes	...	...	(7, 12, 18)
Missouri	yes	yes	...	yes	yes	yes	...	...	yes	yes	...	yes	...	...	...	(7-10)
Montana	yes	yes	yes	...	...	yes	yes	yes	...	...	...	...	...	...	...	(17)
Nebraska	yes	yes	yes	yes	yes	yes ³⁵	yes	yes ⁴	...	...	...	...	...	...	...	...
Nevada	yes	yes	yes ²	yes	yes	yes	yes	yes ³	...	...	...	...	...	...	...	(10, 26)
New Hampshire	yes	yes	yes ¹⁴	yes ¹⁴	yes	yes ⁵	yes ¹⁴	...	...	...	...	...	...	yes	...	(15, 28)
New Jersey	yes	yes	yes ³	...	...	...	...	...	...	...	...	...	...	...	...	...
New Mexico	yes	yes	yes	yes	yes	...	yes	...	yes	...	...	...	...	...	...	...
New York	yes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Carolina	yes	yes	yes	yes	yes	...	...	yes ³⁷	yes	...	yes ³	yes	...	...	...	(23)
North Dakota	yes	yes	yes ²	yes ²	...	yes	yes ²	yes ⁴	...	...	...	...	yes ²	...	...	...
Ohio	yes	yes	...	yes ¹⁴	yes	yes	...	...	...	yes	...	...	...	...	yes	(15, 24, 30)
Oklahoma	yes	yes	yes ²	yes	yes	yes	...	yes ⁴	yes	yes	...	...	...	...	yes	(39)
Oregon	yes	yes	yes ²	yes ²	yes	yes	...	yes ⁴	...	...	...	yes	...	...	...	...
Pennsylvania	yes	yes	yes ³	...	yes	yes ²⁰	...	...	...	yes	...	yes	...	...	yes	(12)
Rhode Island	yes	yes	yes ⁴	yes	yes	...	yes	...	...	...	...	...	yes	...	...	(40)
South Carolina	yes	yes	yes ²	yes	...	...	...	...	...	...	...	...	...	...	...	...
South Dakota	yes	yes ²	yes ²	...	...	yes	yes ²	yes ²	...	...	...	...	...	...	...	(7)
Tennessee	yes	...	yes ³	yes	yes	yes	...	...	yes	yes	...	...	...	...	...	(28, 41)
Texas	yes	yes	yes ¹⁴	...	...	yes	...	yes ⁴	...	...	yes ³⁷	...	...	...	...	...
Utah	yes	yes	yes	yes	yes	yes	yes	yes	...	...	yes ⁴	...	...	...	...	...
Vermont	yes	yes	yes ¹⁴	...	...	yes ³⁵	yes	yes ⁴	...	...	yes ¹⁴	...	...	...	...	(19)
Virginia	yes	...	yes ³	...	yes	yes	...	...	yes	...	...	...	...	...	...	(18, 42, 43)
Washington	yes	yes	yes ²	yes	yes	yes	yes	yes ³	...	...	yes ⁴	yes	...	...	yes	...
West Virginia	yes	yes	yes ³	yes	...	yes	...	...	...	...	...	...	yes	...	...	...
Wisconsin	yes	yes	yes ²	yes	yes	yes ³⁶	...	...	...	yes	yes ⁴	...	...	...	...	(44)
Wyoming	yes	yes	yes ²	yes	yes	yes	yes ²	yes ³	yes	...	yes ⁴	yes	...	...	...	(5, 9)

¹ If unknown to husband. ² 1 year. ³ 2 years. ⁴ 5 years. ⁵ Crime against nature. ⁶ With imprisonment of 1 year. ⁷ Absence of 1 year. ⁸ Felony before marriage. ⁹ Husband a vagrant. ¹⁰ Infamous crime. ¹¹ Loathsome disease. ¹² Relationship within prohibited degree. ¹³ Wife a prostitute. ¹⁴ 3 years. ¹⁵ Absence of 3 years. ¹⁶ Insanity at time of marriage. ¹⁷ Habitual intemperance. ¹⁸ With imprisonment for life. ¹⁹ Absence of 7 years. ²⁰ With imprisonment of 2 years. ²¹ Wife under 16 at time of marriage. ²² Husband under 18 at time of marriage. ²³ Feeble-mindedness or epilepsy for 5 years. ²⁴ Defendant obtained divorce from plaintiff in any other state or country. ²⁵ Absence. ²⁶ Attempt by one party on life of other. ²⁷ Infected other party with communicable venereal disease. ²⁸ Joining a religious cult disbelieving in marriage. ²⁹ Unchaste behavior of wife after marriage. ³⁰ Public defamation. ³¹ 15 months. ³² With imprisonment of 3 years, 18 months of which have been served. ³³ Any cause which, by laws of state, renders marriage null and void at its inception. ³⁴ With imprisonment of 5 years. ³⁵ With imprisonment of 3 years. ³⁶ Noncohabitation for 3 years. ³⁷ 10 years. ³⁸ Maliciously turns spouse out of doors. ³⁹ Gross neglect of duty. ⁴⁰ Any other gross misbehavior or wickedness. ⁴¹ Absence of 2 years. ⁴² Infamous crime before marriage. ⁴³ Fugitive from justice and absent for 2 years. ⁴⁴ Absence of 5 years.

Divorce Information, by State

Sources: Questionnaires to states; and Federal Security Agency, Public Health Service.

State	Residence for divorce	Period before parties may remarry		Number of divorces, 1949 ²	Rates ¹	
		Plaintiff	Defendant		1948 ³	1949 ²
Alabama.....	1 yr.	none	(⁴)	8,441	3.3	2.9
Arizona.....	1 yr.	1 yr.	1 yr.	4,478	...	6.0
Arkansas.....	90 da.	none	none	8,905 ⁵	4.6	...
California.....	1 yr.	1 yr.	1 yr.	38,245	4.1	3.6
Colorado.....	1 yr.	6 mo.	6 mo.	.....	...	...
Connecticut.....	3 yr.	none	none	2,827	1.4	1.4
Delaware.....	2 yr.	none	none	415 ⁶	1.4	...
D. C.....	1 yr. ⁶	6 mo.	6 mo.	1,586	2.3	1.8
Florida.....	90 da.	none	none	17,810	7.4	7.1
Georgia.....	1 yr.	none	none	.....	...	...
Idaho.....	6 wk.	6 mo.	6 mo.	2,773	5.4	4.7
Illinois.....	1 yr.	none	none	.....	...	...
Indiana.....	1 yr.	none	none	.....	...	...
Iowa.....	1 yr.	1 yr.	1 yr.	5,474	2.1	2.1
Kansas.....	1 yr.	6 mo.	6 mo.	6,750 ⁷	3.0 ⁷	3.5 ⁷
Kentucky.....	1 yr.	none	none	.....	...	...
Louisiana.....	1 yr.	none ⁸	none ⁸	.....	...	...
Maine.....	1 yr.	none	none	2,260 ⁶	2.5	...
Maryland.....	1 yr.	none	none	4,919	2.8	2.3
Massachusetts.....	5 yr.	6 mo.	2 yr.	7,653 ⁵	1.7	...
Michigan.....	1 yr.	none	(⁹)	16,017 ⁶	2.6	...
Minnesota.....	1 yr.	6 mo.	6 mo.	4,195	1.6	1.4
Mississippi.....	2 yr.	(¹⁰)	(¹⁰)	6,067	3.2	2.8
Missouri.....	1 yr.	none	none	14,000 ⁷	3.1 ⁷	3.6 ⁷
Montana.....	1 yr.	none	none	1,993	4.1	3.8
Nebraska.....	1 yr.	6 mo.	6 mo.	2,587	2.1	2.0
Nevada.....	6 wk.	none	none	11,000 ^{6,7}	67.1 ⁷	...
New Hampshire.....	1 yr.	none	none	1,009	2.4	1.9
New Jersey.....	2 yr.	none	none	5,826	1.5	1.2
New Mexico.....	1 yr.	none	none	2,631 ⁶	4.6	...
New York.....	(¹¹)	none	3 yr. ¹²	.....	...	...
North Carolina.....	2 yr.	none	none	.....	...	...
North Dakota.....	1 yr.	(⁴)	(⁴)	611	1.2	1.0
Ohio.....	1 yr.	none	none	23,300 ⁷	3.3 ⁷	2.9 ⁷
Oklahoma.....	1 yr.	6 mo.	6 mo.	.....	...	...
Oregon.....	1 yr.	6 mo.	6 mo.	6,276	3.9	3.6
Pennsylvania.....	1 yr.	none	none	12,898	1.3	1.2
Rhode Island.....	2 yr.	none	none	817 ⁶	1.1	...
South Carolina ¹³	1 yr.	none	none	.....	...	...
South Dakota.....	1 yr.	none	none ¹⁴	909	1.7	1.4
Tennessee.....	2 yr.	none	none	7,493	2.6	2.3
Texas.....	1 yr.	1 yr.	1 yr.	38,027	5.4	5.0
Utah.....	3 mo.	6 mo.	6 mo.	2,166	3.3	3.2
Vermont.....	1 yr.	none	2 yr. ¹⁵	565	1.4	1.5
Virginia.....	1 yr.	4 mo.	4 mo.	6,169 ⁷	2.3	2.0 ⁷
Washington.....	1 yr.	none	none	8,105 ⁶	3.3	...
West Virginia.....	1 yr. ¹⁶	6 da.	(¹⁷)	.....	...	...
Wisconsin.....	2 yr.	1 yr.	1 yr.	4,965 ⁷	1.5	1.5 ⁷
Wyoming.....	60 da.	none	none	1,227	4.4	4.3

¹ Per 1,000 estimated total midyear population present in area. ² Provisional figures. Include reported annulments. ³ Leaders (...) indicate data unavailable. ⁴ Revised figures. Include reported annulments. ⁵ At discretion of court. ⁶ 1948. ⁷ 2 yr. if cause for divorce occurred outside D. C. ⁸ Estimated. ⁹ For husband; 10 mo. for wife. In case of adultery, guilty party cannot marry accomplice. ¹⁰ Time set in decree; not to exceed 2 yr. ¹¹ Until court is adjourned that grants the divorce. ¹² Action for divorce may be maintained where: (1) both parties were residents of state when offense was committed; (2) parties were married within state; (3) plaintiff was resident of state when offense was committed and is resident when action commenced. ¹³ By modification of decree by court. ¹⁴ No divorce granted; law permitting divorce passed in 1949. Figures on annulments for 1948-49 not available. ¹⁵ In case of adultery, guilty party may not marry, except to innocent party, until death of innocent party. ¹⁶ Period may be shortened by court. ¹⁷ 2 years if residence is acquired after cause of divorce action arose. No residence required in case of adultery if personal service can be had within state. ¹⁸ 60 days to 1 year.

Marriages and Divorces in the United States, 1890-1949

Source: Federal Security Agency, Public Health Service.

Year	Marriages	Rate ¹	Divorces ²	Rate ¹	Year	Marriages	Rate ¹	Divorces ²	Rate ¹
1890	570,000	9.0	33,461	.5	1924	1,184,574	10.4	170,952	1.5
1895	620,000	8.9	40,387	.6	1925	1,188,334	10.3	175,449	1.5
1900	709,000	9.3	55,751	.7	1926	1,202,574	10.2	184,678	1.6
1901	742,000	9.6	60,984	.8	1927	1,201,053	10.1	196,292	1.6
1902	776,000	9.8	61,480	.8	1928	1,182,497	9.8	200,176	1.7
1903	818,000	10.1	64,925	.8	1929	1,232,559	10.1	205,876	1.7
1904	815,000	9.9	66,199	.8	1930	1,126,856	9.2	195,961	1.6
1905	842,000	10.0	67,976	.8	1931	1,060,914	8.6	188,003	1.5
1906	895,000	10.5	72,062	.8	1932	981,903	7.9	164,241	1.3
1907	936,936	10.8	76,571	.9	1933	1,098,000	8.7	165,000	1.3
1908	857,461	9.7	76,852	.9	1934	1,302,000	10.3	204,000	1.6
1909	897,354	9.9	79,671	.9	1935	1,327,000	10.4	218,000	1.7
1910	948,166	10.3	83,045	.9	1936	1,369,000	10.7	236,000	1.8
1911	955,287	10.2	89,219	1.0	1937	1,451,296	11.3	249,000	1.9
1912	1,004,602	10.5	94,318	1.0	1938	1,330,780	10.3	244,000	1.9
1913	1,021,398	10.5	91,307	.9	1939	1,403,633	10.7	251,000	1.9
1914	1,025,092	10.3	100,584	1.0	1940	1,595,879	12.1	264,000	2.0
1915	1,007,595	10.0	104,298	1.0	1941	1,695,999	12.7	293,000	2.2
1916	1,075,775	10.6	114,000	1.1	1942	1,772,132	13.2	321,000	2.4
1917	1,144,200	11.1	121,564	1.2	1943	1,577,050	11.8	359,000	2.6
1918	1,000,109	9.7	116,254	1.1	1944	1,452,394	11.0	400,000	2.9
1919	1,150,186	11.0	141,527	1.3	1945	1,612,992	12.2	485,000	3.5
1920	1,274,476	12.0	170,505	1.6	1946	2,291,045	16.4	610,000	4.3
1921	1,163,863	10.7	159,580	1.5	1947	1,991,878	13.9	483,000	3.4
1922	1,134,151	10.3	148,815	1.4	1948	1,811,155	12.4	408,000	2.8
1923	1,229,784	11.0	165,096	1.5	1949 ³	1,585,440	10.7	386,000	2.6

¹ Per 1,000 population. For 1917-19 and 1940-46, marriage rates based on population excluding armed forces overseas, and divorce rates based on population including armed forces overseas. For 1947-49, all rates based on population excluding armed forces overseas. ² Includes annulments. ³ Provisional figures. NOTE: Figures for marriages are estimated except for 1925-32 and 1944-49; figures for divorces are estimated except for 1900, 1905, and 1925-32.

Marriage Prospects of Single Men and Women

Source: U. S. Bureau of the Census.

Age	Per cent of population single ¹		Per cent who ever marry ²		Age	Per cent of population single ¹		Per cent who ever marry ²	
	Male	Female	Male	Female		Male	Female	Male	Female
15	99.8	98.8	92.2	93.5	31	21.0	14.7	67.5	50.8
16	99.7	96.1	92.4	93.5	32	20.9	14.7	63.0	46.4
17	99.3	91.0	92.5	93.5	33	18.6	13.0	58.5	42.1
18	97.9	82.3	92.6	93.3	34	17.2	12.6	54.1	38.0
19	94.6	73.0	92.7	92.9	35	15.3	11.2	49.7	34.3
20	89.1	62.8	92.6	92.1	36			45.6	31.0
21	81.0	54.4	92.3	90.8	37			41.6	27.9
22	72.8	46.2	91.8	89.0	38			38.1	25.2
23	62.9	38.7	90.9	86.3	39			34.8	22.6
24	54.3	32.9	89.6	82.8	40	12.6 ³	9.5 ³	31.7	20.2
25	46.9	28.6	88.0	78.5	45	11.2 ³	8.6 ³	19.1	11.3
26	40.8	25.1	85.9	73.7	50	11.0 ³	8.7 ³	11.1	6.1
27	35.0	22.0	83.4	68.9	55	10.8 ³	8.7 ³	6.2	3.2
28	30.6	20.1	80.3	64.4	60	10.5 ³	9.3 ³	3.3	1.6
29	26.2	17.7	76.6	59.9	65 and over	9.8	9.3	1.9	.8
30	25.2	17.9	72.3	55.3					

¹ Per cent single within the specified year of age in 1940, except as specified in footnote 3. ² Per cent of persons single at beginning of year of age who marry during that year and all later years. This figure indicates the total chance of first marriage for single persons who have attained the specified age. ³ Per cent single in age group 40-44, 45-49, etc.; data for single years not available. NOTE: "Single" means those never married; that is, it excludes widowed and divorced. Hence, "marriage prospects" refers to likelihood of first marriage only.

Hospital Facilities in the U. S., 1949

Source: American Medical Association.

State	General	Nervous & mental	Tuberculosis	Maternity	Industrial	Ear, eye, nose, throat	Children's	Other	Totals		
									Hospitals	Beds	Patients
Alabama.....	86	7	7	2	—	—	1	6	109	19,281	262,518
Arizona.....	49	2	12	—	—	—	—	1	64	6,467	91,131
Arkansas.....	60	2	3	—	2	—	1	1	69	13,585	152,719
California.....	269	41	29	11	2	2	4	25	383	98,668	1,189,897
Colorado.....	71	8	12	2	2	—	1	5	101	17,900	201,500
Connecticut.....	37	15	6	—	—	—	—	18	76	22,957	240,650
Delaware.....	9	3	3	—	—	—	—	2	17	4,322	36,232
D. C.....	16	2	1	2	—	1	1	5	28	16,376	154,001
Florida.....	113	6	4	3	—	1	1	12	140	20,173	274,065
Georgia.....	107	7	3	2	2	1	1	8	131	25,323	320,989
Idaho.....	37	3	1	1	—	—	—	2	44	4,032	61,757
Illinois.....	218	33	29	7	1	3	3	36	330	97,163	1,046,107
Indiana.....	96	15	10	—	1	1	—	12	135	29,823	377,348
Iowa.....	106	12	5	2	1	—	—	5	131	22,077	302,043
Kansas.....	101	8	3	2	2	—	—	6	122	18,396	241,472
Kentucky.....	83	11	6	2	1	1	1	6	111	21,191	257,886
Louisiana.....	89	6	5	1	1	2	—	4	108	20,707	312,351
Maine.....	47	6	4	1	—	—	—	—	58	8,727	91,513
Maryland.....	48	17	6	—	—	2	1	11	85	25,303	236,427
Massachusetts.....	137	32	23	6	—	2	3	20	223	64,256	562,496
Michigan.....	180	22	23	4	2	1	1	26	259	62,233	689,607
Minnesota.....	160	14	15	2	—	1	1	18	211	32,795	425,421
Mississippi.....	89	7	1	—	—	—	—	3	100	12,817	192,302
Missouri.....	100	17	7	7	3	2	2	15	153	36,120	405,963
Montana.....	49	1	1	—	1	—	—	2	54	5,598	98,187
Nebraska.....	91	5	1	1	—	—	1	6	105	12,287	160,787
Nevada.....	12	1	—	—	—	—	—	—	13	1,136	18,570
New Hampshire.....	33	2	2	—	—	—	—	2	39	5,950	70,401
New Jersey.....	85	22	15	3	—	1	1	35	162	49,772	463,238
New Mexico.....	36	5	6	—	2	—	—	1	50	4,347	58,253
New York.....	317	57	49	12	2	7	4	73	521	204,681	1,738,437
North Carolina.....	130	10	19	—	1	2	1	8	171	27,244	414,579
North Dakota.....	43	2	1	1	—	—	—	1	48	6,566	92,050
Ohio.....	148	28	23	9	1	—	3	28	240	66,079	820,293
Oklahoma.....	99	7	4	1	—	—	—	7	118	17,473	266,138
Oregon.....	58	7	4	1	—	—	—	5	75	12,745	177,606
Pennsylvania.....	228	41	15	8	—	4	5	47	348	101,394	1,117,833
Rhode Island.....	14	4	4	1	—	—	—	1	24	9,493	76,685
South Carolina.....	55	3	5	—	—	1	—	2	66	13,770	195,678
South Dakota.....	48	3	2	—	—	—	—	1	54	6,927	52,311
Tennessee.....	97	12	9	—	—	6	1	11	136	23,243	310,907
Texas.....	439	17	17	4	5	8	2	22	514	52,560	832,156
Utah.....	29	2	1	1	—	—	1	1	35	4,391	73,505
Vermont.....	23	3	3	—	—	—	—	1	30	4,062	52,188
Virginia.....	95	12	7	—	1	3	—	7	125	29,639	349,823
Washington.....	93	8	12	2	—	—	—	6	121	24,762	333,264
West Virginia.....	65	7	5	—	—	—	—	5	82	13,768	233,197
Wisconsin.....	139	48	20	1	—	—	1	13	222	36,864	445,344
Wyoming.....	27	3	1	—	—	—	—	—	31	3,587	51,628
Total, 1949.....	4,761 ¹	606 ²	444 ³	102 ⁴	33 ⁵	52 ⁶	42 ⁷	532 ⁸	6,572 ⁹	1,439,030	16,659,973
Total, 1948.....	4,589	586	438	100	33	46	39	504	6,335	1,423,520	16,422,774
Total, 1947.....	4,539	585	441	100	33	44	41	493	6,276	1,425,222	15,829,514
Total, 1946.....	4,523	575	450	101	34	46	42	509	6,280	1,468,714	15,153,452
Total, 1945.....	4,744	563	449	106	36	42	44	527	6,511	1,738,944	16,257,402
Total, 1940.....	4,432	602	479	116	33	41	46	542	6,291	1,226,245	10,087,548
Total, 1931.....	4,309	587	509	145	142	61	60	797	6,613	974,115	7,155,976

¹ Beds—patients admitted: 574,683—15,450,311; ² 705,423—308,055; ³ 83,470—113,073; ⁴ 5,087—98,543; ⁵ 2,945—60,159; ⁶ 2,542—118,605; ⁷ 4,656—116,821. ⁸ Includes (hospitals—beds—patients admitted): orthopedic, 87—6,954—36,368; isolation, 56—10,364—148,354; convalescent and rest, 139—6,034—36,396; hospital departments of institutions, 202—20,920—132,831; all other, 78—15,952—40,392. ⁹ Classification by control: federal, 361; state, 573; county, 561; city, 373; city-county, 69; church related (nonprofit), 1,090; nonprofit associations, 2,007; individual and partnership, 1,077; corporations (profit unrestricted), 401.

Sentenced Federal Prisoners, Received from Courts, 1935-1949

Fiscal years ending June 30.

Source: Federal Bureau of Prisons.

Offense	1935	1943	1944	1945	1946	1947	1948	1949
National-security offenses:								
Selective Service Act	....	3,145	3,930	2,613	1,446	833	236	226*
Other national-defense and security laws	....	1,121	1,710	2,150	1,143	578	319	182
Military court-martial cases: { Army	25	511	954	1,793	2,176	2,014	851	592
{ Navy	....	....	8	22	40	50	267	88
Total	25	4,777	6,602	6,588	4,805	3,475	1,673	1,088
Other Federal offenses:								
Counterfeiting and forgery	1,848	522	536	673	891	1,083	1,018	1,204
Embezzlement and fraud	483	473	452	340	350	396	531	582
Immigration laws	2,509	1,466	2,674	3,996	3,629	3,989	3,200	3,526
Juvenile Delinquency Act	....	488	834	911	1,221	870	677	607
Kidnaping	38	42	31	20	21	32	36	23
Liquor laws	12,036	3,502	2,635	2,988	2,425	1,996	1,838	2,035
National Bank and Federal Reserve Act	129	74	67	51	69	50	141	90
Narcotic-drug laws	2,115	1,241	1,306	1,134	1,261	1,447	1,443	1,503
National Motor Vehicle Theft Act	1,252	1,150	1,079	1,072	1,997	2,740	2,612	2,471
Theft from interstate commerce	333	216	362	475	448	524	430	378
White Slave Traffic Act	150	376	255	209	157	183	221	160
Govt. reservation, D. C., high seas terr. cases	700	933	991	986	873	974	1,069	1,054
Other	1,871	1,370	1,392	1,757	1,965	1,867	1,898	2,012
Total	23,464	11,853	12,614	14,612	15,307	16,151	15,114	15,645
Total all offenses	23,489	16,630	19,216	21,200	20,112	19,626	16,787	16,733

* 152 for offenses against Act of 1940; 74 for offenses against Act of 1948. † Offenses committed by persons 17 years of age or under upon which action was taken under the Federal Juvenile Delinquency Act of 1938.

Methods of Execution in the United States

State	Method	State	Method
Alabama	Electrocution	New Jersey	Electrocution
Arizona	Lethal gas	New Mexico	Electrocution
Arkansas	Electrocution	New York	Electrocution
California	Lethal gas	North Carolina	Lethal gas
Colorado	Lethal gas	North Dakota	No death penalty
Connecticut	Electrocution	Ohio	Electrocution
Delaware	Hanging	Oklahoma	Electrocution
D. C.	Electrocution	Oregon	Lethal gas
Florida	Electrocution	Pennsylvania	Electrocution
Georgia	Electrocution	Rhode Island	No death penalty
Idaho	Hanging	South Carolina	Electrocution
Illinois	Electrocution	South Dakota	Electrocution
Indiana	Electrocution	Tennessee	Electrocution
Iowa	Hanging	Texas	Electrocution
Kansas	Hanging	Utah	Hanging
Kentucky	Electrocution		or shooting
Louisiana	Electrocution	Vermont	Electrocution
Maine	No death penalty	Virginia	Electrocution
Maryland	Hanging	Washington	Hanging*
Massachusetts	Electrocution	West Virginia	Hanging
Michigan	No death penalty	Wisconsin	No death penalty
Minnesota	No death penalty	Wyoming	Lethal gas
Mississippi	Electrocution	U. S. (Fed. Gov't.)	Hanging
Missouri	Lethal gas	Alaska	Hanging
Montana	Hanging	Canal Zone	Hanging
Nebraska	Electrocution	Hawaii	Hanging
Nevada	Lethal gas	Puerto Rico	No death penalty
New Hampshire	Hanging	Virgin Islands	Hanging

* Jury can specify whether sentence shall be death or life imprisonment.

Distribution of Arrests by Sex, 1949

Source: Federal Bureau of Investigation.

Offense charged	Males	Per cent	Females	Per cent	Total	Per cent
Criminal homicide.....	5,616	0.8	820	1.0	6,436	0.8
Robbery.....	20,658	2.9	965	1.2	21,623	2.7
Assault.....	52,675	7.4	6,195	7.9	58,870	7.4
Burglary—breaking or entering.....	44,747	6.3	1,145	1.5	45,892	5.8
Larceny— <i>theft</i>	59,572	8.3	8,075	10.3	67,647	8.6
Auto <i>theft</i>	18,668	2.6	451	0.6	19,119	2.4
Embezzlement and fraud.....	20,363	2.9	1,882	2.4	22,245	2.8
Stolen property; buying, receiving, etc.....	2,999	0.4	269	0.3	3,268	0.4
Arson.....	983	0.1	114	0.1	1,097	0.1
Forgery and counterfeiting.....	9,913	1.4	1,318	1.7	11,231	1.4
Rape.....	9,449	1.3	....	....	9,449	1.2
Prostitution and commercialized vice.....	3,391	0.5	5,817	7.4	9,208	1.2
Other sex offenses.....	15,702	2.2	2,746	3.5	18,448	2.3
Narcotic-drug laws.....	5,878	0.8	668	0.9	6,546	0.8
Weapons; carrying, possessing, etc.....	10,817	1.5	541	0.7	11,358	1.4
Offenses against family and children.....	14,554	2.0	788	1.0	15,342	1.9
Liquor laws.....	8,429	1.2	1,505	1.9	9,934	1.3
Driving while intoxicated.....	41,013	5.7	1,894	2.4	42,907	5.4
Road and driving laws.....	10,356	1.5	239	0.3	10,595	1.3
Parking violations.....	158	*	4	*	162	*
Other traffic and motor-vehicle laws.....	9,396	1.3	299	0.4	9,695	1.2
Disorderly conduct.....	42,265	5.9	6,820	8.7	49,085	6.2
Drunkenness.....	162,643	22.9	16,133	20.5	178,776	22.7
Vagrancy.....	46,176	6.5	8,335	10.6	54,511	6.9
Gambling.....	14,980	2.1	1,294	1.6	16,274	2.1
Suspicion.....	42,071	5.9	5,043	6.4	47,114	6.0
Not stated.....	6,290	0.9	938	1.2	7,228	0.9
All other offenses.....	33,582	4.7	4,287	5.5	37,869	4.8
Total arrests, 1949.....	713,444	100.0	78,585	100.0	792,029	100.0

Arrests by Age Groups, 1949

Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests
Under 15.....	3,233	18.....	26,270	22.....	32,792	30-34.....	103,372	50 and over.....	80,040
15.....	3,656	19.....	28,954	23.....	31,486	35-39.....	95,155	Not known..	342
16.....	9,853	20.....	29,416	24.....	30,717	40-44.....	75,909		
17.....	16,180	21.....	34,514	25-29.....	131,427	45-49.....	58,713		

Total Arrests for Previous Years

Year	Arrests	Year	Arrests	Year	Arrests	Year	Arrests
1941.....	630,568	1943.....	490,764	1945.....	543,852	1947.....	734,041
1942.....	585,988	1944.....	488,979	1946.....	645,431	1948.....	759,698

* Less than 1/10 of 1 per cent.

Estimated Number of Major Crimes in the U. S., 1944-49

Source: Federal Bureau of Investigation.

Crime	1944	1945	1946	1947	1948	1949
Murder and nonnegligent manslaughter.....	6,552	6,847	8,442	7,760	7,620	6,990
Manslaughter by negligence.....	3,783	4,387	4,701	5,770	5,390	4,880
Rape.....	10,915	11,537	12,117	17,180	16,180	16,380
Robbery.....	43,804	54,279	62,782	58,100	54,990	59,120
Aggravated assault.....	54,841	59,807	67,512	74,690	77,310	78,860
Burglary—breaking or entering.....	274,134	321,672	357,991	373,450	377,640	409,400
Larceny— <i>theft</i>	796,590	865,521	941,738	943,430	978,000	1,024,520
Auto <i>theft</i>	203,036	241,491	229,920	184,730	169,540	163,140
Total major crimes.....	1,393,655	1,565,541	1,685,203	1,665,110	1,686,670	1,763,290

Motor Vehicle Laws as of September 15, 1950

Source: American Automobile Association.

State	Speed limit ¹	Date new license plates can be used	Driving license Re-quired	Mini-mum age	Gasoline tax	Per cent sales tax	Period of stay ²	Safety responsibility law	Certifi-cate of title required
Alabama.....	A	Oct. 1	yes	16	\$.06	½ ³	Reciprocal	yes	no
Arizona.....	60B	Dec. 15	yes	18	.05	2	(⁴)	yes	yes
Arkansas.....	55	Jan. 1	yes	18	.065	2	90 days ⁵	yes	yes
California.....	55 pf	Jan. 1	yes	16	.045	3	Reciprocal	yes	yes
Colorado.....	60	On issue	yes	16	.06	2	Reciprocal	yes	yes
Connecticut.....	45 J	Feb. 15	yes	16	.04	2 ⁶	Reciprocal	yes	no
Delaware.....	50 C	(⁷)	yes	16	.05	...	Reciprocal	yes	yes
D. C.....	25	Mar. 1	yes	16	.04	2	Reciprocal	yes	yes
Florida.....	60 pf D	Dec. 1	yes	16	.07	...	Reciprocal	yes	yes
Georgia.....	55	Jan. 1	yes	16	.07	...	Reciprocal	yes	no
Idaho.....	A	Jan. 1	yes	16	.06	...	Reciprocal	yes	yes
Illinois.....	A	Dec. 1	yes	15	.03	2	Reciprocal	yes	yes
Indiana.....	A	Jan. 3	yes	16	.04	...	60 days	yes	yes
Iowa.....	A	Dec. 1	yes	16	.04	2	Reciprocal ⁴	yes	no
Kansas.....	A	Jan. 1	yes	16	.05	2	Reciprocal	yes	yes
Kentucky.....	45 pf A	Dec. 29	yes	16	.07	3 ⁸	Reciprocal	yes	(⁹)
Louisiana.....	60	Jan. 1	yes	15	.09	2	Reciprocal	no	no
Maine.....	45	Dec. 25	yes	15	.06	(⁹)	Reciprocal	yes	no
Maryland.....	50 E	Mar. 15	yes	16	.05	2	Reciprocal	yes	yes
Massachusetts.....	40 pf A	Jan. 1	yes	16	.03	(⁹)	Reciprocal ¹⁰	(¹¹)	no
Michigan.....	A	Dec. 1	yes	16	.03	3	90 days	yes	yes
Minnesota.....	60 pf D	Nov. 1	yes	15	.05	...	Reciprocal ¹²	yes	no
Mississippi.....	55	Nov. 1	yes	17	.06	1	(¹³)	no	no
Missouri.....	A	On issue	yes	16	.02	2	Reciprocal	yes	yes
Montana.....	50	Jan. 1	yes	15	.06	...	30 days ^{12, 14}	yes	yes
Nebraska.....	60 F	Jan. 1	yes	15½	.06	...	(¹⁵ , ¹⁶)	yes	yes
Nevada.....	A	Dec. 15	yes	16	.055	...	No limit	yes	yes
New Hampshire.....	50	Mar. 1	yes	16	.04	...	Reciprocal	yes	no
New Jersey.....	40 G	Mar. 1	yes	17	.03	...	Reciprocal	yes	yes
New Mexico.....	A	On issue	yes	14	.07	1	90 days	yes	yes
New York.....	50	Jan. 1	yes	18	.04	...	Reciprocal	yes	no
North Carolina.....	55	Dec. 1	yes	16	.07	3 ¹⁸	Reciprocal	yes	yes
North Dakota.....	60	On issue	yes	16	.06	2	Reciprocal	yes	yes
Ohio.....	50 pf	Mar. 1	yes	16	.04	3	Reciprocal	yes	yes
Oklahoma.....	65 I	Dec. 11	yes	16	.065	2	60 days ¹⁷	yes	yes
Oregon.....	55	Dec. 15	yes	16	.06	...	Reciprocal	yes	yes
Pennsylvania.....	50	Mar. 15	yes	18	.05	...	Reciprocal	yes	yes
Rhode Island.....	35 pf H	Mar. 1	yes	16	.04	1	Reciprocal	yes	no
South Carolina.....	55	Sept. 1	yes	14	.06	...	90 days	no	no
South Dakota.....	60 F	Jan. 1	no	15	.04	2 ¹⁸	90 days	yes	yes
Tennessee.....	A	Mar. 1	yes	16	.07	2	30 days	yes	(⁹)
Texas.....	60 I	Feb. 1	yes	16	.04	1	Reciprocal	no	yes
Utah.....	60 F	Dec. 15	yes	16	.04	2	Reciprocal	yes	yes
Vermont.....	50	Mar. 1	yes	18	.05	...	Reciprocal	yes	no
Virginia.....	50 E	Mar. 15	yes	15	.06	...	6 months	yes	yes
Washington.....	50	Nov. 15	yes	16	.065	3	Reciprocal	yes	yes
West Virginia.....	50	June 20	yes	16	.05	...	90 days	yes	yes
Wisconsin.....	65 I	On issue	yes	16	.04	...	Reciprocal	yes	yes
Wyoming.....	60 pf	Dec. 1	yes	15	.04	2	90 days	yes	yes

¹ A—reasonable and proper; B—lower speed at night and on old highways; C—55 mph on 4-lane highways; D—50 mph pf at night; E—55 mph on dual-lane highways; F—50 mph at night; G—certain highways zoned for 45 mph; H—highways zoned for speed up to 50 mph as posted; I—55 mph at night; J—parkways to 55 mph where marked; pf—prima facie limit. ² Applies to nonresidents. The term "reciprocal" means that the state will extend to a non-resident the identical privileges granted by its home state to nonresident motorists. In some states, visitors must register within a specified time. In most states, persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited time. ³ None on used cars. ⁴ Visitor's permit required after school is often considered intention to reside permanently. ⁵ Use tax on new cars, first registration of used cars. ⁶ Three months before current registration expires. ⁷ B!ll of sale must be filed. ⁸ Excise tax. ⁹ Public liability insurance required after 30 days. ¹⁰ State has compulsory insurance. ¹¹ Visitors must register immediately. ¹² Until home-state license plates expire. ¹³ Extension granted. ¹⁴ Nebraska operator's license required in 30 days. ¹⁵ \$15 maximum. ¹⁶ Visitors must register within 15 days. ¹⁷ Registry tax on first registration in state.

EDUCATION

Elementary and Secondary Public School Statistics, 1948-49

Source: Information Please Almanac Questionnaire.

Note: The number of schools includes rural and one-room school houses. The number of pupils includes only full-time students. The average yearly expenditure is based on the average daily attendance.

State	Elementary			Secondary			Av. yearly expenditure per pupil	Average yearly salary of teachers
	No. schools	No. pupils	No. teachers	No. schools	No. pupils	No. teachers		
Alabama.....	(¹)	436,618	12,940	(²)	220,741	8,176	\$101.52	\$1,988.00
Arizona.....	447	128,643	3,593	69	29,601	1,195	234.34	3,500.00 ³
Arkansas.....	2,554	295,791	8,080	588	121,639	4,725	92.92	1,590.00
California.....	3,478	1,169,067	32,104	567	347,077	19,131	228.44	3,583.00
Colorado.....	1,558	159,830	5,436	355	49,262	3,397	181.90	2,797.00
Connecticut.....	677	196,741	5,721	124	78,269	2,766	205.88	3,328.00
Delaware.....	158	27,113	924	46	16,109	837	212.48	2,834.00
Florida.....	1,502	295,504	9,440	755	171,454	6,792	170.45	2,792.00
Georgia.....	3,528	593,013	16,396	2,069	159,033	6,735	102.45	1,776.28
Idaho.....	681	91,116	2,602	156	30,676	1,376	217.12	2,526.39
Illinois.....	4,509	852,798	31,436	648	299,264	14,874	219.99	3,042.53
Indiana.....	1,706	381,225	13,307	796	266,661	10,751	186.12	3,065.95 ⁴
Iowa.....	7,323	338,354	9,081	919	130,926	13,751	199.40	2,665.50
Kansas ⁵	4,188	243,012	10,561	664	111,580	6,540	129.48	2,766.00
Kentucky.....	4,858	461,263	12,602	566	90,733	5,262	99.52	1,900.00
Louisiana.....	1,722	379,846	6,642	519	67,201	1,681	226.73	2,957.31 ⁶
Maine.....	1,468	122,000	4,449	271 ⁷	43,300	1,762	155.46	2,080.00
Maryland.....	880	217,508	6,288	226	105,230	4,646	182.04	3,376.00 ⁸
Massachusetts.....	1,768	388,389	13,918	328	210,512	10,205	192.88	3,227.00 ⁹
Michigan.....	4,674	661,391	21,269	750	353,127	13,931	239.50	3,212.64
Minnesota.....	7,952	332,446	11,992	642	167,421	8,084	223.00	2,733.00
Mississippi.....	4,324	462,215	10,915	768	79,290	4,964	72.78	1,393.00
Missouri.....	5,800 ²	464,462	16,186	736	143,947	5,829	162.25	2,259.00
Montana.....	1,326	75,529	3,536	178	25,339	1,432	201.00	2,873.00
Nebraska.....	6,272	165,123	8,598	570	60,393	3,219	179.31	2,128.25
Nevada.....	179	20,019	835	35	6,323	328	238.70	3,004.13
New Hampshire.....	555 ⁷	53,402	1,940	84	18,406	1,028	164.20 ⁸	2,551.00 ⁹
New Jersey.....	1,720	454,250	16,718	295	194,615	9,722	250.98	3,262.57
New Mexico.....	730	118,508	(⁹)	151	25,327	(⁹)	155.00 ²	3,000.00 ³
New York.....	5,157	1,362,488	49,414	993	544,489	27,697	279.52	4,725.00 ¹⁰
North Carolina.....	2,970	694,003	19,878	965	170,151	6,389	125.00 ²	2,400.00 ³
North Dakota.....	2,823	86,370	4,793	396	26,547	1,556	180.00	2,018.15 ⁴
Ohio.....	3,103	741,549	23,355	1,217	391,060	18,037	195.12	2,889.00
Oklahoma.....	1,201	377,896	9,813	517	115,996	5,665	156.00	2,311.00
Oregon.....	1,122	187,998	6,838	227	65,655	3,212	245.58	3,160.00
Pennsylvania.....	7,554	980,172	31,019	1,349	557,089	24,047	191.95	2,770.00
Rhode Island.....	305	60,678	2,063	62	33,872	1,767	202.76	3,094.97 ⁵
South Carolina.....	3,314	368,917	11,770	481	109,186	4,572	109.00	1,795.00
South Dakota.....	3,629	86,734	5,266	278	28,579	1,799	207.45	2,054.26
Tennessee.....	4,794	638,920	21,487	(¹¹)	(¹¹)	(¹¹)	122.23	1,871.73
Texas.....	5,161	1,043,955	29,552	1,911	265,460	14,839	201.47	2,579.51
Utah.....	363	91,583	2,520	91	58,953	2,126	254.13	2,972.46
Vermont.....	873	46,351	1,746	85	15,759	638	180.94	2,204.83 ⁶
Virginia.....	2,904	442,611	11,859	550	141,117	5,115	128.54	2,146.00
Washington.....	1,113	255,678	7,708	354	123,842	4,659	232.82	3,275.00
West Virginia.....	4,070	296,644	10,292	382	132,717	5,391	125.63	2,387.00 ⁷
Wisconsin.....	5,647	356,973	14,241	455	140,701	6,674	192.99	2,700.00 ⁸
Wyoming.....	654	43,681	1,710	97	13,313	943	265.29	2,552.00

¹ The Combined figure for elementary and secondary schools is 3,536. ² The figure given is a round-number approximation. ³ Includes principals and supervisors. ⁴ Includes private and parochial schools. ⁵ The figure is for white teachers; \$2,800.00 is the average for colored teachers. ⁶ Includes private schools. ⁷ Includes Junior High Schools. ⁸ The figure is for elementary schools; it is \$258.08 for secondary schools. ⁹ Total number of elementary and secondary school teachers is 4,514. ¹⁰ Average is for New York City only; rest of the state is \$3,110.00; average for total state is \$3,754.00. ¹¹ The figures for elementary schools include secondary school information.

State Compulsory Attendance Laws

State	Date of enactment*	Age limits	State	Date of enactment*	Age limits
Alabama	1915	7-16	Nebraska	1887	7-16
Arizona	1899	8-16	Nevada	1873	7-18
Arkansas	1909	7-16	New Hampshire	1871	8-16
California	1874	8-16	New Jersey	1875	7-16
Colorado	1889	8-16	New Mexico	1891	6-17
Connecticut	1872	7-16	New York	1874	7-16
Delaware	1907	7-16	North Carolina	1907	7-16
D. C.	1864	7-16	North Dakota	1883	7-17
Florida	1915	7-16	Ohio	1877	6-18
Georgia	1916	7-16	Oklahoma	1907	7-18
Idaho	1887	7-16	Oregon	1889	7-16
Illinois	1883	7-16	Pennsylvania	1895	8-17
Indiana	1897	7-16	Rhode Island	1883	7-16
Iowa	1902	7-16	South Carolina	1915	7-16
Kansas	1874	7-16	South Dakota	1883	7-16
Kentucky	1896	7-16	Tennessee	1905	7-16
Louisiana	1910	7-16	Texas	1915	7-16
Maine	1875	7-17	Utah	1890	8-18
Maryland	1902	7-16	Vermont	1867	7-16
Massachusetts	1852	7-16	Virginia	1908	7-16
Michigan	1871	6-16	Washington	1871	8-16
Minnesota	1885	8-16	West Virginia	1897	7-16
Mississippi	1918	7-16	Wisconsin	1879	7-16
Missouri	1905	7-16	Wyoming	1876	7-16
Montana	1883	8-16			

* Date of enactment of first compulsory education law.

Statistics of State School Systems, 1933 to 1948

Years	Enrolment					High-school graduates		Expense per pupil in average daily attendance	Value of textbooks free to pupils
	Total	Elementary schools		Secondary schools					
		Boys	Girls	Boys	Girls	Boys	Girls		
1933-1934 . . .	26,434,193	10,645,991	10,119,046	2,802,122	2,867,034	396,016	440,909	\$ 67.48	\$12,715,857
1935-1936 . . .	26,367,098	10,455,192	9,937,369	2,948,765	3,025,772	447,409	484,874	74.30	22,595,179
1937-1938 . . .	25,975,108	10,153,007	9,595,167	3,032,963	3,193,971	481,906	552,252	83.87	24,230,207
1939-1940 . . .	25,433,542	9,681,465	9,150,633	3,257,952	3,350,492	538,273	604,973	88.09	25,614,116
1940-1941 . . .	25,296,138	9,529,587	9,052,638	3,273,606	3,440,307	536,715	615,508	92.38	26,076,002
1941-1942 . . .	24,562,473	9,336,067	8,838,601	3,089,434	3,298,371	535,156	626,043	98.31	27,012,724
1942-1943 . . .	24,155,146	9,237,002	8,796,078	2,891,633	3,230,433	489,115	597,383	104.85	27,090,248
1943-1944 . . .	23,266,616	9,081,270	8,631,826	2,553,356	3,000,164	393,418	559,836	116.99	23,987,277
1944-1945 . . .	23,225,784	9,053,952	8,611,642	2,565,699	2,994,491	384,673	559,863	125.41	23,954,676
1945-1946 . . .	23,299,941	9,098,013	8,579,731	2,633,117	2,989,080	418,725	555,682	136.41	27,447,595
1946-1947 . . .	23,659,158	9,187,105	8,634,376	2,822,633	3,015,044	505,218	568,461	152.80	29,805,963
1947-1948 . . .	23,944,532	9,429,268	8,861,959	2,747,061	2,906,244	507,649	565,529	179.43	37,553,364

Junior College Enrollment, 1919 to 1948

Source: U. S. Office of Education.

Year	Publicly controlled		Privately controlled		Total	
	Number	Enrollment	Number	Enrollment	Number	Enrollment
1919-20	10	2,940	42	5,162	52	8,102
1929-30	129	36,501	148	19,115	277	55,616
1935-36	187	70,557	228	31,896	415	102,453
1937-38	209	82,041	244	39,469	453	121,510
1939-40	217	107,553	239	42,301	456	149,854
1941-42	231	100,783	230	40,489	461	141,272
1943-44	210	56,439	203	28,177	413	84,616
1945-46	235	109,640	225	46,816	460	156,456
1947-48	242	178,198	230	61,977	472	240,173

Total School Enrollments, 1929-30 to 1947-48

Source: U. S. Office of Education.

Type of school by level	1929-30	1933-34	1939-40	1943-44	1945-46	1947-48
Kindergartens:						
Public.....	723,443	601,775	594,647	697,468	772,957	988,680
Private.....	54,456	37,506	57,341	57,341*	57,341*	182,000
Elementary:						
Public.....	20,555,150	20,228,014	18,286,906	17,053,473	16,954,395	17,326,222
Private.....	2,255,430	2,333,191	2,106,030	2,021,618	2,213,362	2,278,703
Total kindergarten and elem'y schools.....	23,588,479	23,200,486	21,044,924	19,829,900	19,998,055	20,775,605
Secondary:						
Public high schools.....	4,399,422	5,669,156	6,601,444	5,553,520	5,622,197	5,653,305
Private high schools.....	341,158	360,092	457,768	420,961	565,103	602,484
Other†.....	59,287	61,501	54,070	46,409	40,044	39,595
Total secondary schools.....	4,799,867	6,090,749	7,113,282	6,020,890	6,227,349	6,295,384
Normal schools and teachers colleges.....	176,462	136,184	177,045	74,379	119,812	190,342
Colleges, univ., and prof. schools.....	924,275	919,176	1,317,158	803,138	1,557,039	2,425,920
Total higher education.....	1,100,737	1,055,360	1,494,203	877,517	1,676,851	2,616,262
Priv. comm. & bus. schools (day and eve.).....	179,756	102,286	634,546	488,112	563,970†	493,330†

* Data are for 1939-40. † Secondary grades in colleges and teacher-training schools. ‡ Estimated.

Estimated Public and Private School Enrollment, 1950-51

Source: U. S. Office of Education.

Type of school	Enrollment	Type of school	Enrollment
Elementary schools		Higher Education	
Public.....	20,674,000	Universities, colleges, professional schools, including junior colleges and normal schools....	2,700,000
Private and parochial.....	2,887,000		
Residential schools for exceptional children.....	60,000		
Model and practice schools in teacher-training institutions.....	37,000	Other schools	
Federal schools for Indians.....	28,000	Private commercial.....	300,000
Total elementary.....	23,686,000	Nurse-training schools (not affiliated with colleges and universities).....	75,000
Secondary schools		Total other schools.....	375,000
Public.....	5,452,000	Grand total.....	32,903,000
Private and parochial.....	635,000	NOTE: These estimates include enrollments for the entire school or college year; they are not restricted to September enrollments alone.	
Residential schools for exceptional children.....	10,000		
Model and practice schools in teacher-training institutions and preparatory dept. of colleges....	40,000		
Federal schools for Indians.....	5,000		
Total secondary.....	6,142,000		

Number Surviving Through College per 1,000 Pupils

Source: U. S. Office of Education.

Grade or year	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941
Elementary: Fifth*	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sixth.....	954	943	929	935	944	953	946	954	954	955	963	968
Seventh.....	861	872	884	889	895	892	889	895	901	908	916	910
Eighth.....	825	824	818	831	836	842	839	849	850	853	846	886
High School: I.	760	770	780	786	792	803	814	839	811	796	781	781
II.....	647	652	651	664	688	711	725	704	679	655	673	697
III.....	512	529	546	570	594	610	587	554	519	532	552	566
IV.....	454	463	481	510	489	512	466	425	428	444	476	507
Graduates.....	403	417	432	455	462	467	439	393	398	419	450	481
Year of graduation.....	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
College: I.	139	148	154	160	142	129	119	121	†	†	†	†
Graduates.....	70	69	69	47	49	51	†	†	.....	.....	.....	.....
Year of graduation.....	1941	1942	1943	1944	1945	1946	1947	1948	.....	.....	.....	.....

* Fourth grade in 11-grade system; 5th grade in 12-grade system. † Because of veteran students, it is not possible to calculate retention rates.

White and Negro Statistics in Selected States, 1947-48*

Source, this page: U. S. Office of Education.

State	Enrollment		Instructional staff		Average annual salary of teachers		Expense per pupil in A.D.A.†	
	White	Negro	White	Negro	White	Negro	White	Negro
Alabama.....	416,172	230,702	14,279	6,969	\$2,123	\$1,616	\$122.98	\$ 74.97
Arkansas.....	304,760	98,948	10,317	2,630	1,637	1,182	103.29	59.57
Delaware.....	35,830	7,693	1,586	282	2,639	2,661	.....	.....
D. C.....	53,751	43,763	2,099	1,438	.....	.....	.....	.....
Florida.....	299,320	108,285	12,212	3,914	2,777	2,214	177.38	112.70
Georgia.....	451,104	248,360	15,974	7,227	1,924	1,281	126.87	58.73
Kentucky.....	509,458	36,619	17,230	1,395	.....	.....	.....	.....
Louisiana.....	273,380	169,031	10,514	4,733	2,535	1,572	.....	.....
Maryland.....	234,797	67,619	8,214	2,115	3,369	3,137	200.51	165.06
Mississippi.....	259,418	259,988	9,088	6,572	1,703	638	114.74	23.82
Missouri.....	570,575	53,182	21,672	1,693	2,070	2,475	.....	.....
North Carolina.....	589,531	258,740	19,213	7,404	2,109	2,125	113.80	96.39
Oklahoma.....	421,065	35,009	16,203	1,499	2,255	2,522	142.55	167.85
South Carolina.....	251,353	207,457	9,400	6,505	2,007	1,359	146.42	67.62
Tennessee.....	524,473	103,966	17,669	3,126	.....	.....	.....	.....
Texas.....	1,078,242	200,798	40,711	6,950	2,620	2,384	.....	.....
Virginia.....	410,339	150,636	15,081	4,713	2,080	2,003	.....	.....
West Virginia.....	397,984	25,266	14,524	985	.....	.....	.....	.....
Total.....	7,081,552	2,306,062	255,986	70,150	.....	.....	.....	.....

* All figures are for public elementary and secondary schools. † A.D.A. = average daily attendance.

High-school and College Graduates, 1900 to 1948

(Public and private schools)

Year of graduation	HIGH SCHOOL			COLLEGE*		
	Men	Women	Total	Men	Women	Total
1900.....	38,075	56,808	94,883	17,220	8,104	25,324
1910.....	63,676	92,753	156,429	22,557	11,621	34,178
1920.....	123,684	187,582	311,266	31,980	16,642	48,622
1929-30.....	300,376	366,528	666,904	73,615	48,869	122,484
1940-41.....	578,718	642,757	1,221,475	109,546	76,954	186,500
1942-43.....	527,100	635,184	1,162,284	76,182	75,510	151,692
1944-45.....	431,396	615,528	1,046,924	57,270	73,755	131,025
1945-46.....	466,926	613,107	1,080,033	58,664	77,510	136,174
1946-47.....	558,000	631,000	1,189,000	116,890	86,410	203,300
1947-48.....	562,863	627,046	1,189,909	175,456	95,563	271,019

* Bachelors and first professional degrees.

Public and Private Residential Schools for Exceptional Children

Type and year	States reporting*	Schools reporting	Pupils	Type and year	States reporting*	Schools reporting	Pupils
Blind:				Mentally deficient:			
1922.....	40	49	4,666	1936.....	47	130	21,889
1927.....	42	52	5,283	1940.....	47	105	21,883
1931.....	41	55	5,530	1947.....	47	140	21,562
1936.....	43	57	5,921				
1940.....	42	52	5,947	Epileptic:			
1947.....	43	56	5,235	1940.....	†	†	1,117
				1947.....	10	10	1,096
Deaf:				Delinquent:			
1922.....	44	76	11,454	1936.....	50	155	31,418
1927.....	45	77	13,966	1940.....	51	144	29,384
1931.....	46	84	14,890	1947.....	51	167	22,745
1936.....	47	81	15,505				
1940.....	47	81	14,815				
1947.....	47	81	13,123				

* Includes D. C., Territory of Hawaii and Puerto Rico. † Data not available. NOTE: Total number of children (all types), 1946-47: Continental U. S., 63,137; outlying parts of the U. S., 624.

School Enrollment, 1940 and 1949

Source: Department of Commerce, Bureau of the Census.

Year and age	Male			Female			Total		
	Population	Enrollment		Population	Enrollment		Population	Enrollment	
		Number	%		Number	%		Number	%
APRIL, 1940									
5 years old.....	1,087,811	190,842	17.5	1,054,596	194,318	18.4	2,142,407	385,160	18.0
6 years old.....	1,041,757	710,525	68.2	1,012,628	709,526	70.1	2,054,385	1,420,051	69.1
7 to 9 years old.....	3,289,255	3,096,174	94.1	3,198,575	3,022,852	94.5	6,487,830	6,119,026	94.3
10 to 13 years old.....	4,734,213	4,510,906	95.3	4,605,992	4,404,763	95.6	9,340,205	8,915,669	95.5
14 to 17 years old.....	4,902,896	3,869,470	78.9	4,817,523	3,839,401	79.7	9,720,419	7,708,871	79.3
18 and 19 years old.....	2,495,373	769,773	30.8	2,523,461	679,712	26.9	5,018,834	1,449,485	28.9
20 to 24 years old.....	5,692,392	466,895	8.2	5,895,443	293,942	5.0	11,587,835	760,837	6.6
Total.....	23,243,697	13,614,585	58.6	23,108,218	13,144,514	56.9	46,351,915	26,759,099	57.7
OCTOBER, 1949									
5 years old.....	1,463,000	338,000	23.1	1,402,000	279,000	19.9	2,865,000	618,000	21.6
6 years old.....	1,541,000	1,469,000	95.3	1,474,000	1,400,000	95.0	3,015,000	2,869,000	95.2
7 to 9 years old.....	3,895,000	3,838,000	98.5	3,745,000	3,690,000	98.5	7,640,000	7,528,000	98.5
10 to 13 years old.....	4,558,000	4,492,000	98.6	4,408,000	4,355,000	98.8	8,966,000	8,846,000	98.7
14 and 15 years old.....	2,124,000	1,995,000	93.9	2,069,000	1,927,000	93.1	4,193,000	3,922,000	93.5
16 and 17 years old.....	2,052,000	1,452,000	70.8	2,058,000	1,404,000	68.2	4,110,000	2,856,000	69.5
18 and 19 years old.....	1,879,000	593,000	31.6	2,183,000	435,000	19.9	4,062,000	1,028,000	25.3
20 to 24 years old.....	5,384,000	827,000	15.4	5,879,000	215,000	3.7	11,263,000	1,041,000	9.2
Total.....	22,897,000	15,002,000	65.5	23,218,000	13,705,000	59.0	46,115,000	28,707,000	62.3

Degrees Granted by Institutions of Higher Education, 1948-49

Source: U. S. Office of Education.

Field	Bachelor's and first professional		Master's and second professional		Doctor's	
	Men	Women	Men	Women	Men	Women
Agriculture.....	7,768	141	919	23	226	6
Architecture.....	1,506	122	154	10	2	...
Biology.....	6,017	2,258	299	105	82	21
Business and commerce.....	55,232	6,392	3,598	299	27	2
Chemistry.....	7,429	1,703	1,214	213	712	37
Dentistry.....	1,677	88	83	1	...	...
Economics.....	10,378	1,158	748	115	138	11
Education.....	13,347	24,418	7,665	6,163	562	119
Engineering.....	43,446	158	4,625	22	357	3
English.....	6,206	8,720	1,069	883	126	31
Fine arts.....	1,594	2,675	335	248	14	5
History.....	7,232	3,259	1,163	446	181	31
Home economics.....	67	7,636	23	639	...	9
Journalism.....	3,335	1,221	225	44	3	...
Languages, modern.....	1,395	2,769	441	394	86	30
Law.....	13,942	424	445	24	31	2
Mathematics.....	3,513	1,527	712	181	116	10
Medicine, M.D. only.....	4,572	604	...	...	...	...
Music.....	2,920	3,742	934	535	28	2
Nursing.....	20	3,509	...	246	...	2
Pharmacy.....	3,759	493	74	17	38	1
Philosophy.....	1,809	337	253	37	309	13
Physical education.....	5,514	2,328	800	322	20	19
Physics.....	2,645	183	798	43	259	7
Political science.....	4,979	1,137	698	123	107	12
Psychology.....	4,951	3,614	889	566	167	34
Social sciences*.....	3,701	1,972	245	105	17	9
Sociology.....	2,563	4,143	270	133	76	7
Theology.....	2,845	226	631	78	143	...
Veterinary medicine.....	614	27	9	...	7	...
Artst.....	9,535	4,699	1,183	512	200	20
Sciencest.....	5,173	800	463	123	11	1
Total†.....	264,168	302,466	35,278	15,549	4,771	522

* Not elsewhere classified. † Major not specified. ‡ Includes studies not listed.

Federal Government Allotment for School Lunch Program, 1948 and 1949

Source: U. S. Department of Agriculture.

State	1948	1949	State	1948	1949
Alabama.....	\$2,224,023	\$2,288,523	Nebraska.....	\$ 391,945	\$ 402,453
Arizona.....	323,956	326,511	Nevada.....	46,359	31,604
Arkansas.....	1,495,589	1,588,042	New Hampshire.....	174,502	210,783
California.....	2,103,811	2,376,404	New Jersey.....	1,132,923	1,076,604
Colorado.....	440,060	441,793	New Mexico.....	250,523	304,601
Connecticut.....	478,932	510,015	New York.....	3,044,359	3,222,234
Delaware.....	70,496	71,342	North Carolina.....	2,633,689	2,671,503
District of Columbia.....	88,878	134,622	North Dakota.....	192,196	233,474
Florida.....	888,582	1,015,876	Ohio.....	1,971,739	2,343,488
Georgia.....	2,327,390	2,249,762	Oklahoma.....	1,214,215	1,452,971
Idaho.....	229,958	228,592	Oregon.....	372,377	500,603
Illinois.....	2,146,610	2,162,492	Pennsylvania.....	1,884,054	2,229,359
Indiana.....	1,198,376	1,459,652	Rhode Island.....	181,435	199,987
Iowa.....	845,964	995,002	South Carolina.....	1,594,495	1,550,246
Kansas.....	645,946	743,273	South Dakota.....	15,251	17,076
Kentucky.....	1,943,296	2,018,531	Tennessee.....	1,812,269	1,943,490
Louisiana.....	1,574,664	1,738,045	Texas.....	3,330,306	3,739,448
Maine.....	278,071	305,890	Utah.....	321,980	342,771
Maryland.....	634,527	627,761	Vermont.....	133,088	149,163
Massachusetts.....	1,133,761	1,203,783	Virginia.....	1,425,662	1,548,872
Michigan.....	1,776,564	2,120,000	Washington.....	540,669	718,353
Minnesota.....	1,052,418	1,188,292	West Virginia.....	1,090,710	1,202,605
Mississippi.....	1,609,368	1,825,189	Wisconsin.....	993,656	1,183,155
Missouri.....	1,343,052	1,441,537	Wyoming.....	107,099	105,780
Montana.....	179,909	183,448	Total.....	\$51,889,702	\$56,625,000

Federal Funds Allocated to the States, Fiscal Year 1948-49

Source: U. S. Office of Education.

Purpose	Amount	Purpose	Amount
Allocations of federal funds & federal property		Allocations administered by Dept. of Agriculture	
More complete endowment and support of land-grant colleges.....	\$ 5,030,000	Agricultural experiment stations.....	9,703,708
Vocational education*.....	27,127,882	Co-op. agricultural ext. service.....	30,836,263
Federally affected areas.....	5,853,862	Forest grazing lands.....	7,965,288
Vocational rehabilitation.....	18,697,993	School lunch program	
Total.....	56,709,737	Cash distribution.....	58,875,000
Allocations for the education of veterans		Commodity distribution.....	36,049,931
Total.....	3,058,578,230	Total.....	143,430,190

* Below college grade. † Includes amount for tuition, equipment, supplies and materials; subsistence allowances; and building, equipment, and veteran facilities.

Vocational- and Special-School Enrollment, 1949*

Source: U. S. Office of Education.

Type of class	Agriculture	Distributive occupations	Home economics	Trades & industry	Total
Evening.....	290,275	207,621	606,938	267,883	1,372,717
Part-time.....	27,319	104,987	107,275	319,648	559,229
All-day.....	334,010	.....	614,308	214,382	1,162,700
Total.....	651,604	312,608	1,328,521	801,913	3,094,646

* Provisional figures.

Academic Degree Abbreviations

Source: American Council on Education.

Ae.E.	Aeronautical Engineer	G.L.	Graduate in Law
B.A.	Bachelor of Arts	G.N.	Graduate Nurse
B.Ag.	Bachelor of Agriculture	G.Ph.	Graduate in Pharmacy
B.App.Arts	Bachelor of Applied Arts	HH.D.	Doctor of Humanities
B.Arch.	Bachelor of Architecture	L.H.D.	Doctor of Humane Letters
B.B.A.	Bachelor of Business Administration	Litt.M.	Master of Letters
B.B.S.	Bachelor of Business Science	LL.B.	Bachelor of Laws
B.C.E.	Bachelor of Civil Engineering	LL.D.	Doctor of Laws
B.Ch.E.	Bachelor of Chemical Engineering	LL.M.	Master of Laws
B.D.	Bachelor of Divinity	M.A.	Master of Arts
B.Dr.Art	Bachelor of Dramatic Art	M.Aero.E.	Master of Aeronautical Engineering
B.Ed.	Bachelor of Education	M.C.E.	Master of Civil Engineering
B.E.E.	Bachelor of Electrical Engineering	M.C.S.	Master of Commercial Science
B.F.A.	Bachelor of Fine Arts	M.D.	Doctor of Medicine
B.J.	Bachelor of Journalism	M.E.	Mechanical Engineer
B.L.	Bachelor of Letters	M.Ed.	Master of Education
B.Litt.	Bachelor of Literature	Med.Sc.D.	Doctor of Medical Science
B.Med.	Bachelor of Medicine	M.Eng.	Mining Engineer
B.Mus.	Bachelor of Music or in Music	M.F.	Master of Forestry
B.N.	Bachelor of Nursing	M.F.A.	Master of Fine Arts
B.Pharm.	Bachelor of Pharmacy	M.Int.Med.	Master of Internal Medicine
B.Ph.	Bachelor of Philosophy	M.M.	Master of Music
B.S.	Bachelor of Science	M.Mech.Eng.	Master of Mechanical Engineering
B.Th.	Bachelor of Theology	M.Mus.	Master of Music
C.E.	Civil Engineer	M.N.	Master of Nursing
Ch.E.	Chemical Engineer	M.P.H.	Master of Public Health
D.C.E.	Doctor of Civil Engineering	M.R.E.	Master of Religious Education
D.C.L.	Doctor of Civil Law	M.R.P.	Master in Regional Planning
D.C.S.	Doctor of Commercial Science	M.S.	Master of Science
D.D.	Doctor of Divinity	M.Soc.Wk.	Master of Social Work
D.D.S.	Doctor of Dental Surgery	M.Surgery	Master in Surgery
D.Ed.	Doctor of Education	M.Th.	Master of Theology
D.M.L.	Doctor of Modern Languages	O.D.	Doctor of Optometry
D.M.S.	Doctor of Medical Science	Phar.D.	Doctor of Pharmacy
D.P.H.	Doctor of Public Health	Ph.B.	Bachelor of Philosophy
D.R.E.	Doctor of Religious Education	Ph.C.	Pharmaceutical Chemist
D.Sc.	Doctor of Science	Ph.D.	Doctor of Philosophy
D.V.M.	Doctor of Veterinary Medicine	Ph.G.	Graduate in Pharmacy
E.E.	Electrical Engineer	Ph.L.	Licentiate in Philosophy
E.M.	Engineer of Mines	Ph.M.	Master of Philosophy
E.Met.	Engineer of Metallurgy	S.Sc.D.	Doctor of Social Science
		S.T.B.	Bachelor of Sacred Theology
		S.T.D.	Doctor of Sacred Theology
		S.T.M.	Master of Sacred Theology

Colors of Academic Degrees

Agriculture	Maize	Library Science	Lemon
Arts and Letters	White	Medicine	Green
Commerce & Accountancy	Drab	Music	Pink
Dentistry	Lilac	Oratory	Silver gray
Economics	Copper	Pharmacy	Olive green
Education	Light blue	Philosophy	Dark blue
Engineering	Orange	Physical Education	Sage green
Fine Arts, Architecture	Brown	Public Health	Salmon pink
Forestry	Russet	Science	Golden yellow
Humanities	Crimson	Theology	Scarlet
Law	Purple	Veterinary Science	Gray

Accredited U. S. Colleges and Universities, Spring Semester, 1950

Only schools accredited by at least one of the seven regional accrediting associations are listed. The date of founding lists the original issue of the charter. The number of faculty and students includes only those on full-time status. Endowment does not include yearly grants given to state institutions for maintenance, etc., nor does it include living endowment for Catholic schools.

M = Male; F = Female; C = Coeducational; Co = Coeducational; Co = Coordinate

* denotes that figures apply for Fall semester, 1949. † denotes that women are admitted for special courses and graduate work when applied to a male school and that men are admitted in the emergency when applied to a female school.

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
Adams State College; Alamosa, Colo.	1925	N. W. Newsom	33	478 C	29,000	State	816,500
Adelphi College; Garden City, N. Y.	1896	P. D. Eddy	149	2,128 C	48,000	Priv.	3,521,727
Agnes Scott College; Decatur, Ga.	1889	J. R. McCain	63	520 F	61,250	Priv.	145,778
Akron, University of; Ohio	1870	H. E. Simmons	185	2,475 C	77,290	City	7,863,956
Alabama, University of; University, Ala.	1831	J. M. Gallalee	601	6,919 C	350,387	State	669,129
Alabama A and M College; Normal, Ala.*	1875	J. F. Drake	58	1,041 C	15,521	State	912,306
Alabama College; Montevallo, Ala.	1896	J. T. Caldwell	77	687 F	57,500	State	
Alabama Polytechnic Institute; Auburn	1872	R. B. Draughon	475	6,286 C	150,000	State	
Alabama State Teachers College; Florence	1873	E. B. Norton	65	1,230 C	45,000	State	
Alabama State Teachers College; Jacksonville	1882	Houston Cole	50	1,300 C	30,000	State	
Alabama State Teachers College; Livingston	1835	W. W. Hill	36	800 C*	26,342*	State	
Alabama State Teachers College; Montgomery*	1874	H. C. Trenholm	78	1,935 C	14,472	State	
Alabama State Teachers College; Troy	1887	C. B. Smith	44	914 C	24,563	State	
Albertus Magnus College; New Haven, Conn.	1925	Sister M. Coraita	26	215 F	25,000	Cath.	3,654,350
Albion College; Albion, Mich.	1835	W. W. Whitehouse	66	1,279 C	72,854	Meth.	1,156,500
Albright College; Reading, Pa.	1856	H. V. Masters	47	745 C	41,000	Breth.	209,871
Alcorn Agricultural and Mechanical College, Alcorn, Miss.	1871	J. R. Otis	54	644 C	18,461	State	1,200,000
Alfred University; Alfred, N. Y.	1836	M. E. Drake	81	997 C	69,989	Priv.	2,100,000
Allegheny College; Meadville, Pa.	1815	L. T. Benezet	80	1,048 C	120,000	Meth.	596,747
Allen University; Columbia, S. C.	1870	S. R. Higgins	50	900 C	15,000*	A. M. E.	189,000
Alma College; Alma, Mich.	1886	D. D. Welch	35	560 C	54,530	Presb.	852,092
Alverno College; Milwaukee, Wis.	1936	Sister M. Augustine	40	421 F	25,362	Cath.	14,000,000
American International College; Springfield, Mass.	1885	Spencer Miller	53	1,276 C	30,000	Priv.	2,738,000
American University; Washington, D. C.	1893	P. F. Douglass	120	1,089 C	141,504	Meth.	
Amherst College; Amherst, Mass.	1821	C. W. Cole	125	1,260 M	275,280*	Priv.	
Anderson College; Anderson, Ind.	1917	J. A. Morrison	48	923 C	20,413	Ch. of God	
Antioch College; Yellow Springs, Ohio	1835	Douglas McGregor	73	208 C	75,742	Priv.	
Aquinas College; Grand Rapids, Mich.	1973	V. Rev. A. F. Bukowski	30	360 C	20,150	Cath.	
Arizona, University of; Tucson	1885	J. B. McCormick	310	5,579 C	226,000	State	
Arizona State College; Flagstaff	1899	L. A. Eastburn	54	639 C	37,036	State	
Arizona State College; Tempe	1885	Grady Gammage	175	4,794 C	90,000	State	5,000
Arkansas, University of; Fayetteville	1871	L. W. Jones	430	5,593 C	250,754*	State	132,666
Arkansas A and M College; College Heights	1909	H. E. Thompson	50	596 C	14,000*	State	

Arkansas State College; State College; Ark.	1909	W. J. Jendens	69	1,220 C	27,589	State
Arkansas State Teachers College; Conway*	1907	N. M. Irbv	71	1,387 C	30,171	State
Asbury College; Wilmore, Ky.	1890	Z. T. Johnson	46	980 C	42,000	Priv.
Ashland College; Ashland, Ohio	1878	G. L. Clayton	35	505 C	25,300	Breth.
Atlanta University; Ga.	1865	R. E. Clement	41	481 C	102,000	Priv.
Atlantic Union College; So. Lancaster, Mass.	1882	L. N. Holm	40	250 C	29,800	Advent.
Augustana College; Rock Island, Ill.	1860	Conrad Bergendoff	69	1,142 C	76,000	Luth.
Augustana College; Sioux Falls, S. Dak.	1860	L. M. Stawig	53	756 C	24,306	Luth.
Aurora College; Aurora, Ill.	1883	T. P. Stephens	40	412 C	32,949	Advent.
Austin College; Sherman, Texas	1849	W. B. Guerrant	42*	691 C	22,209	Presb.
Austin Peay State College; Clarksville, Tenn.	1929	Halbert Harwill	50	822 C	25,000	State
Baker University; Baldwin, Kans.	1858	N. P. Horn	38	670 C	46,436	Meth.
Baldwin-Wallace College; Berea, Ohio	1845	J. L. Knight	90	1,490 C	53,000	Meth.
Balt State Teachers College; Muncie, Ind.	1918	J. R. Emens	156	2,858 C	115,115	State
Barat College of the Sacred Heart; Lake Forest, Ill.	1898	Mothers M. Reilly	41	335 F	31,217	Cath.
Barry College; Miami, Fla.	1860	J. H. Case, Jr.	34	244 C	60,000	Priv.
Bates College; Lewiston, Me.	1840	Mothers M. Gerald	23	220 F	13,500	Cath.
Beaver College; Jenkintown, Pa.	1864	C. F. Phillips	55	759 C	85,000	Priv.
Behaven College; Jackson, Miss.	1845	W. R. White	228	4,771 C	160,000	Bapt.
Benedict College; Columbia, S. C.*	1894	G. T. Gillespie	25	204 F	20,000	Presb.
Bennett College; Greensboro, N. C.	1870	Carey Coneis	80	1,050 C	162,960	Priv.
Bennington College; Bennington, Vt.	1873	J. A. Bacotts	54	727 C	19,750	Bapt.
Berea College; Berea, Ky.	1855	D. D. Jones	34	453 F	27,451	Meth.
Bessie Trift College; Forsyth, Ga.	1849	Frederick Burkhardt	45	300 F	30,000	Priv.
Bethany College; Bethany, W. Va.	1840	W. F. Gunn	21	228 F	19,500	Bapt.
Bethany College; Lindsborg, Kans.	1881	W. H. Cramblet	42	633 C	48,000	Priv.
Bethel College; North Newton, Kans.	1887	Emory Lindquist	28	349 C	26,000	Luth.
Bethune-Cookman College; Daytona Beach, Fla.	1904	E. G. Kaufman	42	382 C	26,500	Mennon.
Birmingham-Southern College; Birmingham, Ala.	1856	R. V. Moore	45	117 C	18,138	Priv.
Bishop College; Marshall, Texas	1880	G. R. Stuart	54	856 C	70,722	Meth.
Black Hill Teachers College; Spearfish, S. Dak.	1883	J. J. Rhoads	61	741 C	18,000	Priv.
Blue Mountain College; Blue Mountain, Miss.	1873	R. E. Jones	35	325 C	22,000	State
Bluefield State College; Bluefield, W. Va.	1895	H. L. Lowrey	26	257 F	19,183	Bapt.
Boston Teachers College of the City of Mass.	1852	H. L. Dickason	34	546 C	20,000	State
Boston College; Chestnut Hill, Mass.	1863	W. F. Looney	37*	555 C	31,000	City
Bowdoin College; Brunswick, Me.	1839	V. Rev. W. L. Keleher	292	6,159 M†	229,740	Cath.
Bowling Green State University; Bowling Green, Ohio	1794	D. L. Marsh	450	10,781 C	300,000	Priv.
Bradley University; Peoria, Ill.	1910	K. C. M. Sitts	84	865 M	221,000	Priv.
Brenau College; Gainesville, Ga.	1897	F. J. Prout	254	4,378 C	108,646	State
Briar Cliff College; Sioux City, Iowa	1878	D. B. Owen	169	3,341 C	72,000	Priv.
Bridgewater College; Bridgewater, Va.	1930	Josiah Crudup	40	300 F	22,000	Priv.
Brigham Young University; Provo, Utah	1880	Sister J. Marie	32*	437 F	24,000	Cath.
Brooklyn Polytechnic Institute of N. Y.	1854	W. D. Bowman	26	488 C	16,000	Breth.
Brooklyn College of the City of New York	1854	Christen Jensen	225	4,634 C	165,000	Mormon
		H. S. Rogers	285	2,037 M	40,000*	Priv.
		H. D. Gidonse	438	11,196 C	150,000	City

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
Brown University; Providence, R. I. ¹	1764	H. M. Wriston	236	4,095 Co	735,871	Priv.	14,485,422
Bryn Mawr College; Bryn Mawr, Pa.	1880	Katherine E. McBride	71	675 F	220,000	Priv.	9,000,000
Bucknell University; Lewisburg, Pa.	1846	H. A. Hildreth	140	2,121 C	112,000	Bapt.	1,675,927
Buffalo University of N. Y. ³	1846	T. R. McConnell	506	5,557 C	259,095	Priv.	7,548,646
Butler University; Indianapolis, Ind.	1855	M. O. Ross	209	4,000 C	125,000	Priv.	6,000,000
California, University of; Berkeley ⁴	1868	R. G. Sproul	4,188	41,898 C	2,611,605	State	54,937,694
California Institute of Technology; Pasadena	1891	L. A. DuBridge	160	1,161 M	65,000	Priv.	20,000,000
California State Polytechnic College; San Luis Obispo	1901	J. A. McPhee	201	3,348 M	21,054	State	
Calvin College; Grand Rapids, Mich.	1876	Henry Schulze	60	1,715 C	40,410	Ch. Ref.	681,816
Canisius College; Buffalo, N. Y.	1870	V. Rev. R. Schouten	80	1,822 M	48,410	Cath.	4,719,024
Capital University; Columbus, Ohio	1850	H. L. Yochum	78	1,127 C	60,000	Luth.	29,000,000
Carleton College; Northfield, Minn.	1866	L. M. Gould	94	1,067 C	153,287	Priv.	2,100,000
Carnegie Institute of Technology; Pittsburgh, Pa. ⁵	1900	J. C. Warner	272	3,188 C	92,000	Priv.	700,000
Carroll College; Waukegan, Wis.	1846	N. V. Russell	54	704 C	42,000	Presb.	758,047
Carson-Newman College; Jefferson City, Tenn.	1851	Harley Fite	55	33,000	40,930	Bapt.	6,315,000
Carthage College; Carthage, Ill.	1870	Morris Wae	35*	565 C	43,000	Luth.	673,266
Case Institute of Technology; Cleveland, Ohio	1880	T. K. Glennan	148	1,487 M	33,284	Priv.	5,695,601
Catawba College; Salisbury, N. C.	1851	A. R. Koppel	53	803 C	390,000	Evangel. & Ref.	175,000
Catholic University of America; Washington, D. C. ⁶	1867	Rt. Rev. P. J. McCormick	491	3,565 Mt	30,000	Cath.	865,331
Cedar Crest College; Allentown, Pa.	1867	D. H. Moore	37	350 F	33,000	Evangel. & Ref.	1,027,490
Centenary College; Shreveport, La.	1825	J. J. Mickle	55	875 C	54,000	Meth.	471,832
Central College; Fayette, Mo.	1854	R. L. Woodward	58	786 C	24,000	Math.	
Central College; Pella, Iowa	1853	G. T. Vander Lugt	35	429 C	65,293	Ref.	
Central Michigan College of Education; Mount Pleasant	1892	C. L. Anspach	150	2,189 C	78,000	State	
Central Missouri State College; Warrensburg	1871	G. W. Diemer	92	1,671 C	39,500	State	
Central State College; Edmond, Okla.	1890	W. M. Chambers	65	1,141 C	40,000	State	
Central State Teachers College; Stevens Point, Wis.	1894	C. A. Hansen	57	843 C	50,000	State	
Central Washington College of Education; Ellensburg	1891	R. E. McConnell	100	1,569 C	59,143	State	2,543,679
Centre College; Danville, Ky.	1819	W. A. Groves	41	510 C	33,583	Presb.	835,356
Charleston, College of; S. C.	1785	G. D. Grice	17	339 C	150,000	Priv.	1,022,000
Chattanooga, University of; Tenn.	1886	D. A. Lockmiller	90	1,350 C	34,000	Cath.	70,972,076
Chestnut Hill College; Philadelphia, Pa.	1871	Sister M. Kostka	48	434 F	22,924	State	
Cheyney Training School for Teachers; Cheyney, Pa.	1837	L. P. Hill	26	396 C	1,797,202	Priv.	
Chicago, University of; Ill.	1891	R. M. Hutchins	748	6,985 C	40,000	State	
Chicago Teachers College; Ill.	1869	R. M. Cook	80	860 C	69,747	City	
Chico State College; Chico, Calif.	1889	G. L. Kendall	87	1,339 C	50,000	State	
Cincinnati, University of; Ohio	1819	Raymond Walters	368	7,280 C	649,747	City	11,442,921
Citadel, The; The Military College of S. C.; Charleston	1842	Gen. C. P. Sumnerall	140	1,710 M	15,273	State	161,872
Claflin University; Orangeburg, S. C.	1869	J. J. Seabrook	19	364 C	68,565	Meth.	951,467
Claremont Graduate School; Claremont, Calif. ⁷	1925	G. C. S. Benson	14	276 C	250,000	Priv.	1,000,000
Claremont Men's College; Claremont, Calif.	1947	G. C. S. Benson	35	340 M	20,366	Meth.	983,295
Clark College; Atlanta, Ga. ⁸	1869	J. P. Brawley	45	792 C	200,000	Priv.	6,188,000
Clark University; Worcester, Mass.	1887	H. B. Jefferson	74	1,034 C	29,126	Cath.	305,635
Clarke College; Dubuque, Iowa	1843	Sister M. A. Leone	48	456 F	22,000	Priv.	2,000,000
Clarkson Memorial College of Technology; Potsdam, N. Y.	1896	J. H. Davis	96	1,664 M			

Clemson Agricultural College; Clemson, S. C.	1889	R. F. Poole.....	263*	2,911 M	115,000	State	333,208
Coe College; Cedar Rapids, Iowa	1851	B. S. Hollinshead.....	60	632 C	60,000	Priv.	2,400,000
Coker College; Hartsville, S. C.	1908	D. C. Agnew.....	30	276 F†	25,000	Priv.	736,569
Colby College; Waterville, Maine	1813	J. S. Bixler.....	81	1,076 Co	141,000	Priv.	3,738,778
Colgate University; Hamilton, N. Y.	1819	E. N. Case.....	111	1,421 M*	182,000	Priv.	5,853,447
Colorado, University of; Boulder*	1876	R. L. Stearns.....	590	8,814 C	406,000	State	973,384
Colorado A and M College; Fort Collins	1876	W. E. Morgan.....	260	3,416 C	144,537	State	591,892
Colorado College; Colorado Springs	1874	W. H. Gill.....	70	1,252 C	147,500	Priv.	3,000,000
Colorado School of Mines; Golden	1874	J. W. Vanderwilt.....	95	1,059 C	70,000	State	
Colorado State College of Education; Greeley	1890	W. R. Ross.....	116	1,894 C	142,449	State	
Columbia College; Columbia, S. C.	1854	W. K. Greene.....	32	236 F	17,000	Meth.	560,000
Columbia University; N. Y. C.*	1754	D. D. Eisenhower.....	3,198	22,142 C	1,923,243	Priv.	101,206,261
Concord College; Athens, W. Va.	1872	V. H. Stewart.....	50	908 C	18,380	State	
Concordia College; Moorhead, Minn.	1891	J. N. Brown.....	55	1,187 C	36,337	Luth.	591,710
Connecticut, University of; Storrs ¹⁰	1881	A. N. Jorgensen.....	424	8,291 C	121,407	State	159,207
Connecticut College for Women; New London	1904	Rosemary Park.....	94	841 F	132,273	Priv.	2,446,279
Connecticut State Teachers College; Danbury	1849	Ruth A. Haas.....	56	341 C	25,000	State	
Connecticut State Teachers College; New Britain	1883	H. D. Welte.....	137	1,128 C	35,000	State	
Connecticut State Teachers College; New Haven	1889	S. M. Brownell.....	118	943 C	27,000	State	
Connecticut State Teachers College; Willamantic	1889	J. E. Smith.....	45	253 C	12,000	State	
Converse College; Spartanburg, S. C.	1889	E. M. Gwaltney.....	45	367 F	45,400	Priv.	642,571
Cooper Union; N. Y. C.	1859	Gano Dunn.....	61	1,325 C	100,000	Priv.	9,760,000
Cornell College; Mount Vernon, Iowa	1853	R. D. Cole.....	63	737 C	60,000	Priv.	2,893,581
Cornell University; Ithaca, N. Y. ¹¹	1865	C. W. deKiewiet.....	1,011	9,618 C	1,463,968	Priv.-State	42,525,910
Creighton University; Omaha, Nebr.	1878	V. Rev. W. H. McCabe.....	153	2,194 C	165,000	Cath.	9,300,000
Culver-Stockton College; Canton, Mo.	1885	W. H. McDonald.....	36	396 C	34,526	Priv.	596,692
Dakota Wesleyan University; Mitchell, S. Dak.	1885	S. M. Hillburn.....	30	254 C	19,968	Meth.	582,675
Dartmouth College; Hanover, N. H.	1769	J. S. Dickey.....	330	2,808 M	655,004	Priv.	26,178,455
Davidson College; Davidson, N. C.	1837	J. R. Cunningham.....	65	840 M	50,000*	Presb.	6,179,416
Davis and Elkins College; Elkins, W. Va.	1903	R. B. Purdum.....	39	724 C	26,899	Presb.	248,000
Dayton, University of; Ohio*	1850	G. J. Renneker.....	174	3,406 C	46,000	Cath.	5,865,672
Delaware, University of; Newark	1833	J. A. Perkins.....	221	2,819 C	160,000	State	
Delaware State College; Dover	1891	O. J. Chapman.....	35	252 C	20,000	State	
Delta State Teachers College; Cleveland, Miss.	1924	W. M. Kethley.....	48	641 C	25,000	State	3,700,000
Denison University; Granville, Ohio	1831	C. F. Richards.....	87	1,276 C	92,466	Bapt.	2,143,294
Denver, University of; Colo.	1864	A. C. Jacobs.....	426	8,498 C	246,558	Meth.	6,936,551
DePaul University; Chicago, Ill.	1898	V. Rev. C. J. O'Malley.....	285	5,681 C	99,000	Cath.	1,700,000
DePauw University; Greencastle, Ind.	1837	C. E. Wildman.....	125	1,950 C	112,883	Meth.	2,250,000
Detroit, University of; Mich.	1877	Rev. C. J. Steiner.....	253	6,586 C	145,000	Cath.	1,373,500
Dickinson College; Carlisle, Pa.	1773	W. W. Edel.....	70	965 C	87,000	Meth.	3,000,000
Billard University; New Orleans, La.	1930	A. W. Dent.....	45	528 C	25,000	Priv.	1,700,000
Doane College; Crete, Nebr.	1872	D. L. Crawford.....	30	421 C	34,040	Cong.	1,373,500
Drake University; Des Moines, Iowa	1881	H. Y. Harmon.....	230	4,945 C	125,000	Priv.	1,700,000
Drew University; Madison, N. J.	1867	F. G. Holloway.....	51	599 C	201,049	Meth.	8,626,282
Drexel Institute of Technology; Philadelphia, Pa.	1891	James Creeese.....	203	2,985 C	5,950	Priv.	5,000,000
Drury College; Springfield, Mo.*	1873	J. F. Findlay.....	68	842 C	60,000	Priv.	1,011,905
Dubuque, University of; Iowa	1852	R. La Porte.....	45	663 C	34,264	Presb.	1,056,948
Duchesne College; Omaha, Nebr.	1881	Mother M. Downey.....	22	245 F	21,500	Cath.	

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Duke University; Durham, N. C. ¹²	1838	A. H. Edens	528	4,795 Co	994,233	Priv.	
Dunbarton College of Holy Cross; Washington, D. C.	1935	Sister M. Frederick	37	173 F	25,652	Cath.	
Duquesne University; Pittsburgh, Pa.	1878	V. Rev. V. F. Gallagher	154	3,427 C	46,759	Cath.	2,000,000
D'Youville College; Buffalo, N. Y.	1908	Sister Margaret	26	395 F	26,800	Cath.	
Earlham College; Richmond, Ind.	1847	T. E. Jones	44	793 C	72,000	Friends	1,612,339
East Carolina Teachers College; Greenville, N. C.	1907	J. D. Messick	104	1,578 C	70,818	State	
East Central State College; Ada, Okla.	1909	C. F. Spencer	65	1,953 C	40,000	State	
East Tennessee State College; Johnson City	1911	B. E. Dussett	102	1,731 C	50,000	State	
East Texas State Teachers College; Commerce	1889	J. G. Gee	114	2,594 C	101,000	State	
Eastern Illinois State College; Charleston	1895	R. G. Buzzard	150	1,126 C	71,700	State	
Eastern Kentucky State College; Richmond	1906	W. F. O'Donnell	102	1,632 C	80,000	State	
Eastern Montana College of Education; Billings	1925	A. G. Peterson	27	384 C	15,500	State	
Eastern Nazarene College; Wollaston, Mass.	1918	E. S. Mann	28	508 C	20,000	Nazarene	
Eastern New Mexico University; Portales, N. Mex.	1934	F. D. Golden	60	705 C	26,154	State	
Eastern Oregon College of Education; La Grande	1929	R. G. Langston	39	244 C	21,078	State	
Eastern Washington College of Education; Cheney	1890	W. W. Isie	92	1,359 C	80,000	State	750,000
Elizabethtown College; Elizabethtown, Pa.	1899	A. C. Baugher	25	534 C	17,600	Breth.	300,000
Elmhurst College; Elmhurst, Ill.	1871	H. W. Dinkmeyer	47	750 C	42,000	Evan. & Ref.	761,600
Elmira College; Elmira, N. Y.	1855	Lewis Eldred	42	353 F	60,000	Priv.	30,000
Elon College; Elon College, N. C.	1889	L. E. Smith	42	725 C	38,100	Cong.	
Emmanuel College; Boston, Mass.	1919	Sister M. Patricia	66	656 F	41,996	Cath.	
Emmanuel Missionary College; Berrien Springs, Mich.	1874	P. W. Christian	64	909 C	28,086	Advent.	
Emory and Henry College; Emory, Va.	1836	Rev. F. G. Gibson	31	518 C		Meth.	713,504
Emory University; Emory University, Ga.	1836	G. C. White	238	3,303 Mt	332,837	Meth.	
Erskine College; Due West, S. C.	1839	R. C. Grier	35	441 C	29,000	Presb.	409,000
Evansville College; Evansville, Ind.	1854	L. B. Hale	106	1,306 C	29,000	Meth.	450,000
Fairleigh Dickinson Coll'ge; Rutherford, N. J.	1942	Peter Sammartino	102	1,077 C	15,233	Priv.	500,000
Fairmont State College; Fairmont, W. Va.	1865	G. H. Hand	60	871 C	28,000	State	
Fenn College; Cleveland, Ohio	1881	Edward Hodnett	130	1,105 C	29,700	Priv.	809,060
Fisk University; Nashville, Tenn.	1867	C. S. Johnson	62	850 C	101,230	Priv.	4,485,000
Florida, University of; Gainesville	1853	J. H. Miller	1,204	11,709 C	360,000	State	326,450
Florida A and M College; Tallahassee	1887	G. W. Gore, Jr.	142	1,811 C	25,000	State	
Florida Southern College; Lakeland	1885	L. M. Spivey	95	2,000 C	65,000	Meth.	1,500,000
Florida State University; Tallahassee	1857	D. S. Campbell	447	5,419 C	231,288	State	206,000
Fordham University; New York City	1861	Rev. L. J. McGinley	296	7,123 C	240,879	Cath.	1,067,607
Fort Hays Kansas State College; Hays	1891	M. C. Cunningham	101	1,003 C	15,000	State	
Franklin and Marshall College; Lancaster, Pa.	1787	T. A. Distler	74	1,293 M	115,000	Evan. & Ref.	1,698,912
Franklin College; Franklin, Ind.	1834	H. W. Richardson	39	650 C	37,618	Bapt.	1,252,426
Fresno State College; Fresno, Calif.	1911	A. E. Joyal	156	2,766 C	78,593	State	
Furman University; Greenville, S. C.	1826	J. L. Plyler	80	1,182 Co	70,000	Bapt.	4,500,000
Gen. Beadle State Teachers Coll.; Madison, S. Dak.	1881	V. A. Lowry	28	169 C	25,275	State	
Geneva College; Beaver Falls, Pa.	1848	C. M. Lee	52	778 C	48,000	Ref. Presb.	920,000
Geo. Peabody Coll. for Teachers; Nashville, Tenn.	1875	H. H. Hill	116	2,034 C	178,000	Priv.	4,607,260
George Peppardine College; Los Angeles, Calif *	1937	H. M. Tiner	95	1,563 C	31,806	Priv.	1,000,000
George Washington University; Washington, D. C.	1821	C. H. Marvin	425	11,606 C	235,000	Priv.	2,900,000

George Williams College; Chicago, Ill.	1890	H. C. Coffman.	24	314 C	27,720	Priv.	246,120
Georgetown College; Georgetown, Ky.	1829	S. S. Hill.	50	674 C	19,575	Bapt.	683,286
Georgetown University; Washington, D. C.	1789	V. Rev. H. Guthrie.	431	5,583 Mt	394,000	Cath.	7,000,000 (?)
Georgia University of Athens*	1785	J. C. Rogers.	570	6,301 C	241,608	State.	2,063,815
Georgia Institute of Technology; Atlanta.	1885	B. R. Van Leer.	300	4,600 M	125,000	State.	650,000
Georgia State College for Women; Milledgeville.	1889	G. H. Wells.	100	766 F	47,380	State.	
Georgia Teachers College; Collegeboro.	1924	Z. S. Henderson.	56	724 C	38,000	State.	
Georgian Court College; Lakewood, N. J.	1908	Sister Marie Anna.	30	210 F	30,000	Cath.	
Gettysburg College; Gettysburg, Pa.	1832	H. W. A. Hanson.	90*	1,245 C	64,590	Luth.	500,000
Glenville State College; Glenville, W. Va.	1872	H. B. Heflin.	30	539 C	25,555	State.	
Gonzaga University; Spokane, Wash.	1887	Rev. F. E. Corkery.	91	1,712 C	51,000	Cath.	
Good Counsel College; White Plains, N. Y.	1923	Sister M. Dolores.	24	349 F	17,346	Cath.	
Goucher College; Goshen, Ind.	1894	E. E. Miller.	38	574 C	37,300	Mennon.	158,026
Great Falls, College of; Great Falls, Mont.	1885	O. F. Kraushaar.	53	710 F	88,411	Priv.	2,082,853
Greensboro College; Greensboro, N. C.	1932	Mother Lucia.	20	350 C	23,804*	Cath.	
Grinnell College; Grinnell, Iowa.	1838	L. L. Gobel.	31	324 F	32,829	Meth.	648,124
Grove City College; Grove City, Pa.	1846	H. J. Long.	30	366 C	25,000	Meth.	130,000
Guilford C. llege; Guilford College, N. C.	1876	S. N. Stevens.	90	1,084 C	120,000	Cong.	4,000,000
Hamilton College; Clinton, N. Y.	1837	W. C. Keller.	60	1,376 C	47,290	Priv.	924,742
Hampden-Sydney College; Hampden-Sydney, Va.	1812	E. A. Milner.	35	527 C	34,000	Friends.	1,050,500
Hamline University; St. Paul, Minn.	1854	R. W. McEwen.	66	1,074 C	40,535	Luth.	1,311,898
Hampden-Sydney College; Hampden-Sydney, Va.	1812	R. W. McEwen.	53	599 M	214,127	Priv.	4,654,312
Hampton Institute; Hampton, Va.	1876	H. R. Anderson.	96	1,445 C	65,000	Meth.	4,000,000
Hanover College; Hanover, Ind.	1868	E. G. Gammon.	29	395 M	40,000	Presb.	1,212,452
Hardin-Simmons University; Abilene, Texas.	1827	A. G. Moron.	139	1,471 C	80,000	Priv.	10,000,000
Harris Teachers College; St. Louis, Mo.	1891	A. G. Parker, Jr.	43	633 C	45,000	Presb.	5,000,000
Hartwick College; Oneonta, N. Y.	1857	R. N. Richardson.	103	2,127 C	42,460	Bapt.	1,450,000
Harvard University; Cambridge, Mass.	1928	C. A. Naylor.	63	338 C	25,638	State.	
Hastings College; Hastings, Nebr.	1836	H. J. Arnold.	45	496 C	25,000	Luth.	300,000
Haverford College; Haverford, Pa.	1882	J. B. Conant.	2,500	11,105 M	5,250,000	Priv.	200,000,000
Heidelberg College; Tiffin, Ohio.	1833	W. M. French.	50	696 C	37,000	Presb.	728,614
Henderson State Teach. Coll.; Arkadelphia, Ark.	1850	G. F. White.	50	501 M	180,000	Friends.	5,000,000
Hendrix College; Conway, Ark.	1829	Terry Wickham.	60*	778 C	40,000	Evan. & Ref.	1,250,000
Hillsdale College; Hillsdale, Mich.	1884	D. D. McBrien.	71	1,030 C	30,624	State.	
Hiram College; Hiram, Ohio.	1850	M. L. Ellis.	37	531 C	52,000	Meth.	1,522,163
Hofstra College; Hempstead, N. Y.	1850	H. L. Turner.	40	579 C	31,000	Bapt.	750,000
Hollins College; Hollins College, Va.	1935	P. H. Fall.	40	607 C	60,000	Priv.	1,250,000
Holy Cross, College of; Worcester, Mass.	1842	J. C. Adams.	97	2,214 C	35,135	Priv.	749,000
Holy Names, College of; Oakland, Calif.	1843	V. Rev. J. A. O'Brien.	42	339 F	4,700	Priv.	943,760
Holy Names College; Spokane, Wash.	1863	Sister M. M. Rose.	114	1,823 M	150,000	Cath.	501,025
Hood College; Frederick, Md.	1907	Sister M. F. Xavier.	32	352 F	31,000	Cath.	
Hope College; Holland, Mich.	1893	A. G. Truxal.	26	200 F	32,477	Cath.	880,832
Houghton College; Houghton, N. Y.	1851	I. J. Lubbers.	52	520 F	47,693	Ref.	1,103,793
Howard College; Birmingham, Ala.	1883	S. W. Paine.	70	1,124 C	27,211	Meth.	285,409
Howard Payne College; Brownwood, Texas.	1842	H. G. Davis.	45	727 C	44,000	Bapt.	778,349
Howard University; Washington, D. C.*	1889	T. H. Taylor.	80	1,093 C	26,000	Bapt.	1,550,000
	1867	M. W. Johnson.	42	858 C		Priv.	1,595,971
			467	4,693 C	258,902		

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
Humboldt State College; Arcata, Calif.	1913	C. H. Siemens.	44	550 C	25,000	State	
Hunter College; New York, N. Y.	1870	G. N. Shuster.	508	7,870 Ft	166,442	City	391,625
Huntington College; Montgomery, Ala.	1854	Hubert Searcy.	46	741 C	34,453	Meth.	490,121
Huron College; Huron, S. Dak.	1883	G. F. McDougall.	21	256 C	29,000	Presb.	764,338
Idaho, College of; Caldwell.	1891	P. M. Pitman.	28	471 C	24,200	Presb.	556,000
Idaho, University of; Moscow.	1869	J. E. Buchanan.	275	3,793 C	105,000	State	2,800,088
Illinois, University of; Urbana ⁴ .	1867	G. D. Stoddard.	2,998	22,893 C	2,383,503	State	1,474,454
Illinois College; Jacksonville.	1829	H. G. Hudson.	29	424 C	38,566	Presb. & Cong.	2,800,088
Illinois Inst. of Technology; Chicago.	1882	H. T. Heald.	235	3,087 C	115,000	Priv.	1,474,454
Illinois State Normal University; Normal.	1857	R. W. Fairchild.	258	2,255 C	142,056	State	3,000,000
Illinois Wesleyan University; Bloomington.	1850	M. J. Holmes.	76	1,146 C	48,416	Meth.	2,118,720
Immaculata College; Immaculata, Pa.	1914	R. Rev. V. L. Burns.	40	318 F	27,000	Cath.	
Immaculate Heart College; Hollywood, Calif.*.	1916	Sister M. Eucharis.	55	854 F	43,320	Cath.	250,166
Incarinate Word College; San Antonio, Texas.	1881	Sister M. Columille.	53	609 F	38,150	Cath.	130,000
Indiana Central College; Indianapolis.	1902	I. L. Esch.	31	470 C	23,500	Breth.	
Indiana State Teachers College; Terre Haute.	1865	R. N. Tiley.	155	2,465 C	158,838	State	3,393,000
Indiana University; Bloomington and Indianapolis*.	1820	H. B. Wells.	1,625	23,213 C	800,339	State	1,446,762
Iowa State University; Iowa City.	1847	V. M. Handker.	637	9,835 C	623,057	State	1,400,000
Iowa State College; Ames, Iowa.	1858	C. E. Friley.	670	9,000 C	460,000	State	
Iowa State Teachers College; Cedar Falls*.	1876	Malcolm Price.	333	2,950 C	140,000	State	
Iowa Wesleyan College; Mt. Pleasant.	1832	J. R. Chadwick.	37	559 C	21,500	Meth.	510,718
Jackson College; Jackson, Miss.	1877	J. L. Reddix.	49	729 C	15,436	State	182,280
James Millikin University; Decatur, Ill.	1903	J. W. Malone.	60	1,239 C	43,543	Presb.	2,753,570
Jamestown College; Jamestown, N. Dak.	1883	S. S. George.	27	474 C	25,000	Presb.	1,300,000
John B. Stetson University; Deland, Fla.	1883	J. O. Edmunds.	104	1,473 C	138,688	Bapt.	1,306,131
John Carroll University; Cleveland, Ohio.	1886	V. Rev. F. E. Welfle.	81	1,593 M	57,000	Cath.	3,500,000
Johns Hopkins University; Baltimore, Md. ¹⁰ .	1876	D. W. Bronk.	592	2,522 Mt	810,000	Priv.	36,125,750
Johnson C. Smith University; Charlotte, N. Car.	1867	Hardy Liston.	40	697 C	32,000	Presb.	2,000,000
Judson College; Marion, Ala.	1838	J. I. Riddle.	26	189 F	20,000	Bapt.	615,000
Juniata College; Huntington, Pa.	1876	C. N. Ellis.	47	609 C	54,000	Breth.	860,169
Kalamazoo College; Kalamazoo, Mich.	1833	J. S. Everton.	41	647 C	44,080	Bapt.	1,022,392
Kansas, University of; Lawrence and Kansas City.	1865	D. W. Malatt.	558	7,963 C	416,000	State	1,250,000
Kansas City, University of; Mo.	1929	C. R. Decker.	195*	3,067 C	251,573	Priv.	10,000,000
Kansas State College; Manhattan.	1863	J. A. McCain.	625	6,435 C	155,206	State	557,121
Kansas State Teachers College; Emporia.	1863	D. L. MacFarlane.	114	1,474 C	100,000	State	
Kansas State Teachers College; Pittsburg.	1903	R. H. Hughes.	165	1,738 C	76,521	State	
Kent State University; Kent, Ohio.	1910	G. A. Bowman.	333	5,336 C	96,960	State	
Kentucky, University of; Lexington.	1865	H. L. Donovan.	426	6,957 C	511,358	State	200,000
Kentucky State College; Frankfort.	1886	R. B. Atwood.	72	641 C	20,078	State	
Kentucky Wesleyan College; Winchester.	1866	P. S. Powell.	18	214 C	23,653	Meth.	337,707
Kenyon College; Gambier, Ohio.	1824	G. K. Chalmers.	55	512 M	125,000	Episc.	2,395,890
Keuka College; Keuka Park, N. Y.	1890	Katherine G. Blyley.	33	443 F	38,395	Bapt.	396,035
King College; Bristol, Tenn.	1867	R. T. L. Liston.	14	217 C	16,096	Presb.	676,000
Knox College; Galesburg, Ill.	1837	S. G. Umbeck.	75	808 C	80,000	Priv.	2,914,278
Knoxville College; Knoxville, Tenn.	1875	J. R. Miller.	16	232 C	14,000	Presb.	560,000

La Grange College; La Grange, Ga.	1831	W. G. Henry, Jr.	27	286 C	17,000	Meth.	850,000
La Salle College; Philadelphia, Pa.	1863	Brother G. Paul	95	1,810 M	31,500	Cath.	
La Sierra College; Arlington, Calif.	1922	G. T. Anderson	45	650 C	26,500	Advent.	5,083,079
Lafayette College; Easton, Pa.	1826	R. C. Hutchison	147	1,906 M	126,000	Presb.	780,000
Lake Erie College; Painesville, Ohio	1849	A. T. Hill	30	180 F	40,000	Priv.	1,429,851
Lake Forest University; Lake Forest, Ill.	1857	E. A. Johnson	50	940 C	68,000	Presb.	
Langston University; Langston, Okla.	1897	G. L. Harrison	66	857 C	37,208	State	1,500,000
Lawrence College; Appleton, Wis.	1847	N. M. Pusey	79	932 C	75,716	Priv.	775,439
Lebanon Valley College; Bethlehem, Pa.	1866	C. A. Lynch	55*	696 C	47,367	Brath.	8,260,029
LeMoyne College; Memphis, Tenn.	1871	M. D. Whitaker	278	2,691 Mt	280,000	Priv.	3,000
Lenoir Rhyne College; Hickory, N. Car.	1891	H. F. Price	23	409 C	18,000	A.M.A.	708,755
Lewis and Clark College; Portland, Oreg.	1867	V. R. Cromer	43	865 C	33,000	Luth.	330,124
Limestone College; Gaffney, S. Car.	1845	M. S. Odell	80	1,304 C	26,130	Presb.	832,500
Lincoln Memorial University; Harrogate, Tenn.	1897	R. C. Granberry	32*	334 Ft	29,697	Priv.	861,022
Lincoln University; Jefferson City, Mo.	1866	R. L. Kincaid	30	520 C	33,000	Priv.	
Lincoln University; Lincoln University, Pa.	1854	S. D. Scruggs	94	752 C	40,185	State	1,032,351
Lindenwood College; St. Charles, Mo.	1827	H. M. Bond	36	430 M	48,000	Priv.	2,920,605
Linfield College; McMinnville, Oreg.	1857	F. L. McCluer	53	334 F	33,142	Presb.	925,000
Livingstone College; Salisbury, N. Car.	1879	H. L. Dillin	43	749 C	41,653	Bapt.	46,500
Longwood College; Farmville, Va.	1884	W. J. Trent	51	418 C	27,580	A.M.E.	
Loras College; Dubuque, Iowa	1839	D. S. Lancaster	55	601 Ft		State	
Loretto Heights College; Loretto, Colo.	1918	S. D. Luby	81	1,452 M	110,000	Cath.	
Louisiana College; Pineville	1906	Sister F. Marie	48	442 F	22,950	Cath.	929,383
Louisiana Polytechnic Institute; Ruston*	1894	Edgar Godbold	45	794 C	22,200	Bapt.	
Louisiana State Univ. and A. M. College; Baton Rouge ¹⁸	1860	R. L. Ropp	184	2,348 C	41,988	Cath.	324,313
Louisville, University of; Ky. ¹⁷	1798	H. W. Stoke	557	8,286 C	492,371	State	2,444,272
Lowell Textile Institute; Lowell, Mass.	1895	J. W. Taylor	318	4,620 C	166,188	City & St.	
Loyola College; Baltimore, Md.	1852	M. J. Lydon	65	625 C	6,845	State	
Loyola University; Chicago, Ill. ¹⁹	1870	V. Rev. F. X. Talbot	52	900 Mt	44,112	Cath.	
Loyola University; Los Angeles, Calif.	1911	Rev. J. T. Hussey	151	6,773 C	229,639	Cath.	
Loyola University; New Orleans, La.	1912	Rev. C. S. Casassa	87	1,991 M	48,814	Cath.	2,124,330
Luther College; Decorah, Iowa	1861	V. Rev. T. J. Shields	180	1,687 Mt	100,000	Cath.	5,000,000
Lynchburg College; Lynchburg, Va.	1903	J. W. Yivisaker	46	806 C	93,604	Luth.	559,119
Macalester College; St. Paul, Minn.	1885	O. W. Wake	46*	738 C	28,000	Dis. of Ch.	370,000
MacClure College for Women; Jacksonville, Ill.	1845	C. J. Turk	129	1,665 C	53,513	Presb.	2,350,000
McPherson College; McPherson, Kans.	1887	C. P. McClelland	50	552 F	52,737	Priv.	4,130,630
Madison College; Harrisonburg, Va.	1908	D. W. Bittling	33	80 C	15,000	Brath.	512,708
Maine, University of; Orono	1865	G. T. Miller	92	1,179 Ft	56,809	State	1,290,000
Manhattan College; North Manchester, Ind.	1879	A. A. Hauck	248	4,404 C	225,600	State	618,196
Manhattanville Coll. of Sacred Heart; New York, N. Y.	1853	V. F. Schwalm	50	765 C	38,262	Brath.	
Marquette College; Marietta, Ohio	1841	Brother B. Thomas	112	2,546 M	95,318	Cath.	400,902
Marquette University; Milwaukee, Wis.	1835	Mother E. M. O'Byrne	89	391 F	83,751	Cath.	1,763,646
Marshall College; Huntington, W. Va.	1864	W. B. Irvine	65	1,028 C	130,342	Priv.	2,500,000
Mary Baldwin College; Staunton, Va.	1837	Rev. E. J. O'Donnell	560	7,050 C	137,643	Cath.	
Mary Hardin-Baylor College; Belton, Texas	1845	S. H. Smith	161	2,394 C	64,103	State	
Mary Marise College; Toledo, Ohio	1922	F. B. Lewis	38	310 F	32,100	Priv.	540,000
		G. G. Singleton	42	724 F	32,100	Bapt.	1,475,000
		Sister V. de Paul	43	152 F	23,000	Cath.	

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
Marygrove College; Detroit, Mich.	1910	Sister M. Honora	98	801 F	57,515	Cath.	.....
Maryland, University of; College Park and Baltimore	1807	H. C. Byrd	1,182	14,200 C	235,000	State	3,001,376
Maryland State Teachers College; Frostburg	1899	Lillian Compton	28	269 C	20,247*	State	.....
Maryland State Teachers College; Salisbury	1925	J. D. Blackwell	24	263 C	25,000	State	.....
Maryland State Teachers College; Towson	1866	E. T. Hawkins	60	126 C	35,000	State	.....
Maryhurst College; Maryhurst, Oreg.	1930	Sister M. R. Augusta	31	270 F	25,000	Cath.	55,000
Marymount College; Salina, Kans.	1922	Mother M. Chrysostom	33	266 F	23,000	Cath.	1,000,000
Marymount College; Tarrytown, N. Y.	1907	Mother M. T. Dalton	60	525 F	20,771	Cath.	2,066,111
Maryville College; Maryville, Tenn.	1819	R. W. Lloyd	56	863 C	53,995	Presb.	144,445
Marywood College; Scranton, Pa.	1915	Sister M. Eugenia	44	540 F	42,738	Cath.	540 F
Massachusetts, University of; Amherst	1863	R. A. Van Meter	256	3,182 C	171,336	State	181,763
Massachusetts Inst. of Technology; Cambridge	1861	J. R. Killian, Jr.	1,237	5,068 C	435,000	Priv.	47,000,000
Massachusetts State Tech. Coll.; Bridgewater	1860	J. J. Kelly	44	605 C	27,498	State	.....
Massachusetts State Tech. Coll.; Fitchburg	1894	E. F. White	46	596 C	26,000	State	.....
Massachusetts State Tech. Coll.; Framingham	1839	M. F. O'Connor	35	547 F	29,000	State	.....
Massachusetts State Tech. Coll.; North Adams	1894	G. C. Bowman	21	251 C	15,000	State	.....
Massachusetts State Tech. Coll.; Worcester	1871	E. A. Sullivan	18	435 C	17,000	State	.....
Memphis State College; Tenn.	1909	Lamar Newport	115	2,368 C	50,000	State	.....
Mercer University; Macon, Ga.	1833	Spright Dowell	75	942 C	93,000	Bapt.	3,025,489
Mercyhurst College; Erie, Pa.	1926	Mother M. F. Egan	34	290 F	19,000	Cath.	1,680,000
Meredith College; Raleigh, N. Car.	1891	Carlyle Campbell	45	521 F	33,000	Bapt.	606,000
Miami, University of; Coral Gables, Fla.	1925	B. F. Ashe	400	10,304 C	200,000	Priv.	1,225,000
Miami University; Oxford, Ohio	1809	E. H. Hahn	450	5,553 C	229,002	State	.....
Michigan, University of; Ann Arbor	1817	A. G. Ruthven	1,309	20,083 C	1,454,676	State	19,760,435
Michigan Coll. of Mining and Tech.; Houghton	1885	G. C. Dillman	179	1,706 C	55,000	State	.....
Michigan State College; East Lansing	1855	J. A. Hannah	780	14,674 C	416,497	State	2,438,167
Michigan State Normal College; Ypsilanti	1849	E. B. Elliott	225	2,485 C	130,000	State	70,000
Middle Tennessee State College; Murfreesboro	1909	Q. M. Smith	78	1,122 C	30,000	State	.....
Middlebury College; Middlebury, Vt.	1800	S. S. Stratton	80	1,175 C	118,700	Priv.	4,800,080
Midland College; Fremont, Nebraska	1887	W. P. Hieronymus	29	503 C	27,500	Lyth.	234,288
Mills College; Oakland, Calif.	1852	L. T. White, Jr.	67	671 F	110,411	Priv.	2,175,000
Millsaps College; Jackson, Miss.	1892	M. L. Smith	45	800 C	35,000	Weth.	1,339,924
Milwaukee-Dowder College; Milwaukee, Wis.	1851	Ludra R. Briggs	42	355 F	52,456	Priv.	2,458,714
Miner Teachers College; Washington, D. C.	1851	E. A. Clark	49	555 C	42,380	State	35,000,000
Minnesota, University of; Minneapolis	1851	J. L. Morrill	2,153	21,658 C	1,276,444	State	.....
Minnesota State Teachers College; Bemidji	1919	G. R. Saltgast	54	580 C	27,660	State	.....
Minnesota State Teachers College; Mankato	1867	C. L. Crawford	117	1,688 C	32,500	State	.....
Minnesota State Teachers College; Moorhead	1887	O. W. Snarr	72	747 C	28,500	State	.....
Minnesota State Teachers College; St. Cloud	1869	J. W. Headley	151	1,766 C	55,525	State	.....
Minnesota State Teachers College; Winona	1858	Nels Minne	54	603 C	31,952	State	.....
Mississippi Southern College; Hattiesburg	1812	Sister M. Teresa	35	487 F	23,825	Cath.	1,100,000
Mississippi College; Clinton	1848	J. D. Williams	268	3,092 C	170,668	State	758,558
Mississippi Southern College; Hattiesburg	1812	R. C. Cook	130	2,571 C	37,000	Bapt.	1,000,000
Mississippi State College; State College, Miss.	1878	F. T. Mitchell	224	3,065 C	130,000	State	248,789

Mississippi State College for Women; Columbus.	1884	B. L. Parkinson.	80	993 F	82,000	State.
Missouri: University of; Columbia and Rolla.	1839	F. A. Middlebush.	740	11,671 C	677,300	State.
Missouri Valley College; Marshall.	1888	H. R. Bartle.	42	520 C	55,000	Presb.
Monmouth College; Monmouth, Ill.	1853	James Harp.	64	909 C	34,000	Presb.
Montana School of Mines; Butte.	1893	F. A. Thomson.	32	287 C ⁹	20,500	State.
Montana State College; Bozeman.	1893	R. R. Renne.	212	3,183 C	85,788	State.
Montana State University; Missoula.	1893	R. H. Jesse.	189	2,990 C	336,395	State.
Moravian College; Bethlehem, Pa.	1807	R. S. Haupt.	32	449 M	53,000	Morav.
Morehead State College; Morehead, Ky.	1867	B. E. Mays.	65	669 M	101,804	Priv.
Morgan State College; Baltimore, Md.	1923	W. J. Baird.	41	709 C	47,094	State.
Morningside College; Sioux City, Iowa.	1867	M. D. Jenkins.	92	1,703 C	44,407	State.
Morris Brown College; Atlanta, Ga.*	1889	E. A. Roadman.	60	1,020 C	61,000	Method.
Mount Holyoke College; South Hadley, Mass.	1881	W. A. Fountain, Jr.	61	808 G	9,366	A. M. E.
Mount Mary College; Milwaukee, Wis.	1837	R. G. Ham.	113	1,261 F	223,514	Priv.
Mount Mercy College; Pittsburg, Pa.	1914	E. A. Fitzpatrick.	60	600 F	40,000	Cath.
Mount St. Agnes College; Baltimore, Md.	1929	Mother M. Francella McConnell	40	322 F	23,000	Cath.
Mount St. Joseph-on-the-Ohio; College of; same*.	1867	Sister M. Thomas.	33	153 F	22,000	Cath.
Mount St. Mary's College; Hooksett, N. H.*	1854	Mother M. Zoe.	51	432 F	30,000	Cath.
Mount St. Mary's College; Emmitsburg, Md.	1934	Sister M. Mauritia.	20	187 F	16,861	Cath.
Mount St. Mary's College; Los Angeles, Calif.	1808	Rt. Rev. J. L. Sheridan.	35	684 M	30,000	Cath.
Mount St. Scholastica College; Atchison, Kans.	1925	Sister A. Marie.	38	641* F	28,000	Cath.
Mount St. Vincent; College of; On-Hudson, N. Y.	1840	Sister A. Schroll.	40	350 F	30,000	Cath.
Mount Union College; Alliance, Ohio.	1847	F. Cardinal Spellman.	54	568 F	23,242	Cath.
Muhlenberg College; Allentown, Pa.	1846	C. B. Ketcham.	51	789 C	79,801	Method.
Mundelein College; Chicago, Ill.	1848	Levering Tyson.	80	997 M	80,000	Luth.
Murray State College; Murray, Ky.	1930	Sister M. Josephine.	77	858 F	33,859	Cath.
Buskingum College; New Concord, Ohio.	1923	R. H. Woods.	91*	1,506 C	42,651	State.
National College of Education; Evanson, Ill.	1837	R. N. Montgomery.	70	893 C	40,000	Presb.
Nazareth College; Louisville, Ky.	1886	K. R. Johnson.	45	375 F	35,191	Priv.
Nazareth College; Nazareth, Mich.	1920	Sister M. Coady.	58*	388 F	28,178	Cath.
Nazareth College; Rochester, N. Y.*	1897	Sister M. Kevin.	25	300 F	30,000	Cath.
Nebraska, University of; Lincoln.	1924	Mother R. Miriam.	54	428 F	25,000	Cath.
Nebraska State Teachers College; Chadron.	1869	R. G. Gustafson.	503	8,642 C	500,000	State.
Nebraska State Teachers College; Kearney.	1911	W. G. Brooks.	51	399 C	30,687	State.
Nebraska State Teachers College; Peru.	1905	H. L. Cushing.	56	855 C	38,663	State.
Nebraska State Teachers College; Wayne.	1867	W. O. Reed.	43	364 C	45,342	State.
Nebraska Wesleyan University; Lincoln.	1910	V. P. Morey.	59	787 C	38,000	State.
Nevada, University of; Reno.	1887	C. C. Bracy.	50	789 C	39,421	Method.
New Hampshire, University of; Durham.	1874	M. A. Love.	114	1,455 C	90,000	State.
New Hampshire Teachers College; Keene.	1866	A. S. Adams.	247	3,590 C	150,861	State.
New Hampshire Teachers College; Plymouth.	1909	L. P. Young.	51	478 C	23,104	State.
New Jersey State Teachers College; Glasboro.	1871	H. R. Jones.	39*	278 C	16,870	State.
New Jersey State Teachers College; Jersey City.	1923	E. F. Bunc.	35	525 C	30,000	State.
New Jersey State Teachers College; Newark.	1929	F. A. Irwin.	41	503 C	43,094	State.
New Jersey State Teachers College; Paterson.	1912	J. B. Dougall.	39	678 C	32,000	State.
New Jersey State Teachers College; Trenton.	1855	C. S. Wightman.	33	526 C	25,000	State.
New Jersey State Teachers College; Upper Montclair.	1855	R. L. West.	73	886 C	64,750	State.
	1908	H. A. Sprague.	90	1,094 C	55,741	State.

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
New Mexico, University of; Albuquerque.....	1889	R. L. Popejoy.....	250	4,501 C	184,432	State.....	1,127,298
New Mexico, College of A and M Arts; State College.....	1889	J. W. Branson.....	137	1,397 C	67,000	State.....	676,472
New Mexico Highlands University; Las Vegas.....	1893	Edward Eyring.....	84	882 C	40,000	State.....	
New Mexico School of Mines; Socorro.....	1889	E. J. Workman.....	28	247 C	12,050	State.....	
New Mexico Western College; Silver City.....	1893	H. W. James.....	54	365 C	33,501	State.....	
New Rochelle, College of; New Rochelle, N. Y.....	1904	Mother M. Dunkerley.....	57	840 F	65,858	Cath.....	
New York, College of the City of ²⁰	1847	H. M. Wright.....	710	10,257 C ²¹	350,000	City.....	534,632
New York State College for Teachers; Albany.....	1844	E. R. Collins.....	122*	1,559 C	40,000	State.....	
New York State College for Teachers; Buffalo.....	1871	H. W. Rockwell.....	150	1,968 C	40,200	State.....	
New York State Teachers College; Brockport.....	1841	D. M. Tower.....	75	1,068 C	35,000	State.....	
New York State Teachers College; Cortland.....	1863	D. V. Smith.....	104	1,373 C	33,840	State.....	
New York State Teachers College; Fredonia.....	1867	L. R. Gregory.....	72	742 C	20,829	State.....	
New York State Teachers College; Genesee.....	1867	H. G. Espy.....	64	622 C	35,000	State.....	
New York State Teachers College; New Paltz.....	1886	W. J. Haggerty.....	91	773 C	18,500	State.....	
New York State Teachers College; Oneonta.....	1889	C. W. Hunt.....	55	620 C	34,704	State.....	
New York State Teachers College; Oswego.....	1861	H. M. Rice.....	109	1,403 C	47,962	State.....	
New York State Teachers College; Plattsburgh.....	1899	C. C. Ward.....	47	700 C	29,900	State.....	
New York State Teachers College; Potsdam.....	1816	F. W. Crumb.....	76	669 C	22,174	State.....	
New York University; New York.....	1831	R. W. Chase.....	1,483	21,375 C	845,179	Priv.....	14,160,138
Newark College of Engineering; Newark, N. J.....	1881	H. W. V. Houten.....	148	1,376 C	21,500	State.....	
Newberry College; Newberry, S. C.....	1856	J. C. Kinard.....	31	508 C	26,340	Luth.....	310,000
Niagara University; Niagara University, N. Y.....	1856	V. Rev. F. L. Meade.....	93	1,361 M†	52,000	Cath.....	
North Carolina, A and Technical College of; Greensboro.....	1891	F. D. Bluford.....	180	2,437 C	36,746	State.....	
North Carolina, University of; Chapel Hill, N. C. ²¹	1789	Gordon Gray.....	640	7,514 C	557,189	State.....	3,934,828
North Carolina College; Durham.....	1910	A. Elder.....	83	1,259 C	34,688	State.....	
North Carolina State Teachers College; Elizabeth City.....	1891	S. D. Williams.....	30*	527 C	22,268	State.....	
North Carolina State Teachers College; Fayetteville.....	1877	J. W. Seabrook.....	33	601 C	25,924	State.....	100,000
North Carolina State Teachers College; Winston-Salem.....	1892	F. L. Atkins.....	33	458 C	28,747	State.....	1,330,000
North Central College; Naperville, Ill. ²	1861	C. H. Gaiger.....	48	869 C	40,196	Evan.....	1,701,000
North Dakota, University of; Grand Forks.....	1883	J. C. West.....	170	2,750 C	109,500	State.....	
North Dakota Agricultural College; Fargo.....	1890	F. S. Hutz.....	156	2,227 C	77,000	State.....	
North Dakota State Normal and Industrial College; Ellendale.....	1899	J. C. McMillan.....	19	171 C	18,271	State.....	
North Dakota State Teachers College; Dickinson.....	1917	C. E. Scott.....	28	390 C	20,556	State.....	
North Dakota State Teachers College; Mayville.....	1889	Casper Lura.....	26	248 C	21,120	State.....	
North Dakota State Teachers College; Minot.....	1913	C. C. Swain.....	65	544 C	35,000	State.....	
North Dakota State Teachers College; Valley City.....	1890	R. L. Lokken.....	43	431 C	38,000	State.....	
North Georgia College; Dahlonega, Ga.....	1873	M. E. Hoag.....	45	613 C	20,511	State.....	
North Texas State College; Denton.....	1890	W. J. McConnell.....	302	6,036 C	205,000	State.....	
Northeast Missouri State Teachers College; Kirksville.....	1867	W. H. Ryle.....	81	1,258 C	110,000	State.....	
Northeastern State College; Tahlequah, Okla.....	1909	John Vaughan.....	65	1,162 C	46,527	State.....	
Northeastern University; Boston, Mass.....	1898	C. S. Eli.....	417	4,546 C	30,480	Priv.....	4,257,742
Northern Idaho College of Education; Lewiston.....	1893	G. W. Todd.....	40	588 C	27,000	State.....	
Northern Illinois State Teachers College; DeKalb.....	1895	L. A. Holmes.....	180	2,000 C	72,264	State.....	
Northern Michigan College of Education; Marquette.....	1899	H. A. Tape.....	88	987 C	37,615	State.....	20,000
Northern State Teachers College; Aberdeen, S. Dak.....	1899	N. E. Steele.....	46	383 C	35,000	State.....	

Northwest Missouri State College; Maryville.	1905	J. W. Jones.....	76	BH C	44,500	State.
Northwest Nazarene College; Nampa, Idaho	1913	L. T. Corlett.....	36	520 C	16,000	Nazarene.
Northwestern State College; Alva, Okla.	1897	S. C. Perceull.....	40	538 C	30,900	State.
Northwestern State College; Natchitoches, La.	1884	G. W. McGinty.....	144	1,453 C	55,243	State.
Northwestern University; Evanston, Ill.	1851	J. R. Miller.....	486	9,300 C	1,000,000	Priv.
Norwich University; Northfield, Vt.	1819	E. N. Harmon.....	53	600 M	49,779	Priv.
Notre Dame of Maryland, College of; Baltimore.	1873	Sister M. Mary.....	44	369 F	34,000	Cath.
Notre Dame, University of; Notre Dame, Ind.	1842	Rev. J. J. Cavanaugh.....	359	4,788 F	263,900	Cath.
Notre Dame College; South Euclid, Ohio	1922	Mother M. Langenderfer.....	35	285 F	26,162	Cath.
Notre Dame College; Staten Island, N. Y.	1931	Mother St. Egbert.....	27	300 F	13,000	Cath.
Oberlin College; Oberlin, Ohio.	1833	W. E. Stevenson.....	178	2,056 C	486,000	Priv.
Occidental College; Los Angeles, Calif.	1887	A. G. Coons.....	77	1,366 C	96,174	Priv.
Ohio College of Education and Industrial Arts; Wilberforce.	1887	C. H. Wesley.....	85	1,054 C	20,000	State.
Ohio State University; Columbus.	1873	H. L. Bewis.....	1,289	19,560 C	803,700	State.
Ohio University; Athens.	1804	J. C. Baker.....	300	4,762 C	175,000	State.
Ohio Wesleyan University; Delaware.	1841	A. S. Flemming.....	125	1,963 C	189,199	Meth.
Oklahoma, University of; Norman and Oklahoma City.	1890	A. L. Gross.....	570	10,465 C	327,533	State.
Oklahoma A and M College; Stillwater.	1891	H. G. Bennett.....	794	10,728 C	256,326	State.
Oklahoma College for Women; Chickasha.	1908	Dan Procter.....	50	775 F	40,000	State.
Omaha, Municipal University of; Omaha, Nebr.	1909	P. M. Ball.....	80	1,835 C	76,000	City.
Oregon, University of; Eugene.	1872	H. K. Newburn.....	305	5,269 C	451,064	State.
Oregon College of Education; Monmouth.	1882	R. J. Maaske.....	27	577 C	30,000	State.
Oregon State College; Corvallis.	1868	A. L. Strand.....	449	6,023 C	251,848	State.
Ottawa University; Ottawa, Kans.	1865	A. B. Martin.....	30	484 C	30,000	Bapt.
Otterbein College; Westerville, Ohio.	1847	J. G. Howard.....	52	864 C	40,000	Breth.
Quachita College; Arkadelphia, Ark.	1885	S. W. Eubanks.....	40	632 C	28,000	Bapt.
Our Lady of the Elms, College of; Chicopee, Mass.	1928	M. Rev. C. Weldon.....	25	270 F	18,248	Cath.
Our Lady of the Lake College; San Antonio, Tex.	1896	J. L. McMahon.....	57	448 F	49,404	Cath.
Pacific, College of the; Stockton, Calif.	1851	R. E. Burns.....	75	1,111 C	50,000	Meth.
Pacific Lutheran College; Parkland, Wash.	1894	S. C. Eastvold.....	60	900 C	40,000	Luth.
Pacific Union College; Angwin, Calif.	1882	J. E. Weaver.....	65	837 C	40,793	Advent.
Paine College; Forest Grove, Oreg.	1849	W. C. Giersbach.....	51	877 C	41,148	Cong.
Paine College; Augusta, Ga.	1883	E. C. Peters.....	22	362 C	28,050	Meth.
Park College; Parkville, Mo.	1875	J. L. Zwingle.....	39	438 C	50,975	Presb.
Pasadena College; Pasadena, Calif.	1902	W. T. Purkiser.....	40*	710 C	35,000	Nazarene.
Pennsylvania, University of; Philadelphia.	1740	H. E. Stassen.....	1,080	9,585 C*	1,165,210	Priv.
Pennsylvania College for Women; Pittsburgh.	1869	P. R. Anderson.....	50	500 F	36,767	Priv.
Pennsylvania State College; State College.	1855	M. S. Eisenhower.....	1,215	14,970 C	350,000	State.
Pennsylvania State Teachers College; Bloomsburg.	1839	H. A. Andruss.....	30	901 C	50,000	State.
Pennsylvania State Teachers College; California.	1852	R. M. Steele.....	62	1,018 C	29,627	State.
Pennsylvania State Teachers College; Clarion.	1867	P. G. Chandler.....	55	788 C	22,534	State.
Pennsylvania State Teachers College; East Stroudsburg.	1857	J. F. Noonan.....	52	1,090 C	27,500	State.
Pennsylvania State Teachers College; Edinboro.	1893	L. H. Van Houten.....	50	669*	27,000	State.
Pennsylvania State Teachers College; Indiana.	1875	W. E. Pratt.....	103	1,500 C	28,437	State.
Pennsylvania State Teachers College; Kutztown.	1866	Q. A. W. Rohrbach.....	51	969 C	35,000	State.
Pennsylvania State Teachers College; Lock Haven.	1878	R. T. Parsons.....	50	609 C	35,263	State.
Pennsylvania State Teachers College; Mansfield.	1862	J. G. Morgan.....	70	845 C	35,000	State.
Pennsylvania State Teachers College; Millersville.	1854	D. L. Biemdesierfer.....	40	854 C	33,327	State.

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Pennsylvania State Teachers College; Shippensburg.	1871	H. L. Kriner.	46	776 C	38,000	State.	
Pennsylvania State Teachers College; Slippery Rock.	1889	D. W. Houk.	68	858 C	28,876	State.	
Pennsylvania State Teachers College; West Chester.	1871	C. S. Swope.	98	1,631 C	50,000	State.	963,846
Phillips University; Enid, Okla.	1907	E. S. Briggs.	64	1,135 C	53,773	Dis. Church.	8,621,514
Pittsburgh, University of; Pa.	1787	R. H. Fitzgerald.	728	9,770 C	578,000	Priv.	5,496,432
Pomona College; Claremont, Calif.	1887	E. W. Lyon.	88	1,011 C	121,500	Priv.	
Portland, University of; Oreg.	1901	Rev. T. J. Mehling.	110	2,159 M	50,000	Cath.	55,000,000
Princeton University; Princeton, N. J.	1746	H. W. Dodds.	420	3,718 M	1,500,000	Priv.	877,685
Principia College; Elmhurst, Ill.	1898	F. E. Morgan.	35	441 C	42,131	Priv.	
Providence College; Providence, R. I.	1919	V. Rev. R. J. Slavin.	105	1,898 M	35,000	Cath.	1,500,000
Puget Sound, College of; Tacoma, Wash.	1888	R. F. Thompson.	82	2,057 C	60,000	Meth.	340,000
Purdue University; Lafayette, Ind.	1869	F. L. Hovde.	1,067	12,002 C	286,244	State.	
Queens College; Charlotte, N. C.	1857	McAlister Carson.	43	350 F	25,833	Presb.	
Queens College; Flushing, N. Y.	1937	J. J. Theobald.	204	3,236 C	801,483	City	
Radcliffe College; Cambridge, Mass.	1879	W. K. Jordan.	(*)	1,222 F	102,000	Priv.	7,982,721
Randolph-Macon College; Ashland, Va.	1830	J. E. Moreland.	30	512 M	43,614	Meth.	1,091,871
Randolph-Macon Woman's College; Lynchburg, Va.	1893	T. H. Jack.	71	640 F	71,859	Priv.	1,345,000
Redlands, University of; Redlands, Calif.	1909	G. H. Armacost.	73	1,283 C	82,374	Bapt.	3,054,361
Reed College; Portland, Oreg.	1911	E. B. MacNaughton.	60	644 C	90,000	Priv.	1,562,083
Regis College for Women; Weston, Mass.	1927	Sister M. St. Ignatius.	59	570 F	36,000	Cath.	190,100
Rensselaer Polytechnic Institute; Troy, N. Y.	1824	L. W. Houston.	400	3,822 M†	52,000	Priv.	13,000,000
Rhode Island College of Education; Providence.	1854	L. A. Whipple.	60	459 C	24,706	State.	
Rhode Island State College; Kingston.	1892	C. R. Woodward.	210	2,345 C	105,000	State.	
Rice Institute; Houston, Tex.	1912	W. V. Houston.	120	1,562 C	200,000	Priv.	30,000,000
Richmond, University of; Va.	1830	G. M. Mordin.	99	2,003 Co ^{as}	115,000	Bapt.	3,246,337
Ripon College; Ripon, Wis.	1851	C. G. Kuebler.	57	727 C	48,715	Priv.	1,150,257
Rivier College; Nashua, N. H.	1933	Sister M. St. Pascal.	25	114 F	20,201	Cath.	737,617
Romoke College; Salem, Va.	1842	H. S. Oberly.	36	570 C	28,348	Luth.	62,606,317
Rochester, University of; N. Y.*	1850	Alan Valentine.	800	6,933 C	496,097	Priv.	1,072,000
Rockford College; Rockford, Ill.	1847	Mary A. Cheek.	39	337 F	38,700	Priv.	
Rockhurst College; Kansas City, Mo.	1910	Rev. T. M. Knapp.	63	699 M	22,826	Cath.	
Rollins College; Winter Park, Fla.	1885	P. A. Wagner.	62	624 C	80,000	Priv.	1,029,000
Roosevelt College; Chicago, Ill.	1905	E. J. Spurling.	279	5,415 C	60,000	Priv.	10,000
Rosary College; River Forest, Ill.	1901	Sister M. Timothea.	74*	670 F	62,464	Cath.	136,230
Rose Polytechnic Institute; Terre Haute, Ind.	1874	F. L. Wilkinson.	38	314 M	24,300	Priv.	2,166,000
Rosemont College; Rosemont, Pa.	1921	Rev. Mother Boniface.	46	330 F	40,000	Cath.	
Russell Sage College; Troy, N. Y.	1916	L. A. Froman.	60	651 F	54,863	Priv.	1,096,240
Rutgers University; New Brunswick, N. J.	1766	R. C. Clothier.	792	8,104 Co ^{as}	573,602	State.	6,621,071
St. Ambrose College; Davenport, Iowa.	1882	Rt. Rev. A. Burke.	72*	1,057 M	30,000	Cath.	600,000
St. Anselm's College; Manchester, N. H.	1869	Rt. Rev. B. C. Dolan.	49	671 M	29,000	Cath.	400,000
St. Augustine's College; Raleigh, N. C.	1867	H. L. Trigg.	24	460 C	18,000	Episc.	
St. Benedict, College of; St. Joseph, Minn.	1913	Mother R. Peters.	35	235 F	28,000	Cath.	
St. Benedict's College; Atchison, Kans.	1856	Rt. Rev. C. McDonald.	45	490 M	100,000	Cath.	
St. Bernardine of Siena College; Loudonville, N. Y.	1937	Rev. M. Kennedy.	92	1,860 M	32,805	Cath.	3,932,015
St. Bonaventure University; St. Bonaventure, N. Y.	1859	V. Rev. J. Lalor.	111	1,944 M	119,000	Cath.	

St. Catherine, College of; St. Paul, Minn.	1905	Sister Antonine.....	88	748 F	64,000	Cath.	650,000
St. Edward's Seminary; Kenmore, Wash.	1931	V. Rev. J. Brennan.....	18	220 M	15,000	Cath.	
St. Elizabeth, College of; Convent Station, N. J.	1899	Sister M. J. Byrne.....	50	637 F	34,000	Cath.	
St. Francis, College of; Joliet, Ill.	1920	Sister M. Ancieta.....	32	307 F	36,500	Cath.	16,000
St. Francis College; Loretto, Pa.	1847	Rev. A. J. Veigle.....	37	515 C	20,000	Cath.	1,400,000
St. Francis Xavier College; Chicago, Ill.	1912	Sister M. McCarthy.....	42	300 F	56,000	Cath.	
St. John College; Cleveland, Ohio.....	1928	Rt. Rev. R. B. Navin.....	30	312 F	25,402	Cath.	50,000
St. John's University; Brooklyn, N. Y.	1870	Rev. J. A. Flynn.....	172	7,447 C	90,589	Cath.	500,000
St. Joseph's College; West Hartford, Conn.	1932	Rev. Mother Ethelreda.....	34	440 F	22,325	Cath.	
St. Joseph's College; Philadelphia, Pa.	1809	F. J. Dodd.....	32	174 F	16,600	Cath.	
St. Joseph's College for Women; Brooklyn, N. Y.	1851	V. Rev. J. J. Long.....	48	1,359 M†	26,000	Cath.	
St. Lawrence University; Canton, N. Y.	1916	Rt. Rev. W. T. Dillon.....	47*	433 F	32,421	Cath.	43,000
St. Louis University; St. Louis, Mo. ²	1856	E. G. Bewkes.....	100	1,413 C	93,000	Priv.	2,000,000
St. Martin's College; Olympia, Wash.	1818	Rev. P. C. Reinert.....	395	7,017 C	445,464	Cath.	4,052,066
St. Mary College; Xavier, Kans.	1895	Rt. Rev. R. Heider.....	35	320 M	33,000	Cath.	
St. Mary of the Springs, College of; Columbus, Ohio.....	1923	A. M. Murphy.....	39	300 F	42,000	Cath.	
St. Mary-of-the-Wasatch, College of; Salt Lake City, Utah.....	1911	Sister M. Angelita.....	25	250 F	30,000	Cath.	
St. Mary of the Woods College; St. Mary of the Woods, Ind.	1926	Sister M. Benedictus.....	20	99 F	12,881	Cath.	
St. Mary's College; Notre Dame, Ind.	1840	Mother M. Helene.....	52	360 F	72,000	Cath.	500,000
St. Mary's College; St. Mary's College, Calif.	1844	Sister M. Madeleva.....	46	660 F	42,100	Cath.	
St. Mary's College; Winona, Minn.	1863	Brother W. Thomas.....	46	782 M	48,000	Cath.	
St. Michael's College; Winoski Park, Vt.	1913	Brother J. Ambrose.....	33	480 M	28,193	Cath.	
St. Norbert College; West De Pere, Wis.	1904	V. Rev. D. P. Lyons.....	60	1,100 M	45,000	Cath.	111,000
St. Olaf College; Northfield, Minn.	1898	Rt. Rev. B. H. Pennings.....	38	641 M	38,000	Cath.	
St. Patrick's Seminary; Menlo Park, Calif.	1874	C. M. Granskou.....	117	1,669 C	93,290	Luth.	1,102,392
St. Paul Seminary; St. Paul, Minn.	1896	T. C. Mulligan.....	19	191 M	35,000	Cath.	
St. Peter's College; Jersey City, N. J.	1872	Rev. R. G. Bandas.....	18	265 M	40,000	Cath.	
St. Rose, College of; Albany, N. Y.	1920	Rev. J. J. Shandhan.....	60	1,700 M	22,000	Cath.	
St. Scholastica, College of; Duluth, Minn.	1912	Sister Rose of Lima.....	49	765 Ft	22,431	Cath.	133,174
St. Teresa, College of; Kansas City, Mo.	1867	Mother A. Braegelmann.....	53	420 F	35,000	Cath.	
St. Thomas, College of; St. Paul, Minn.	1909	Sister M. Jennings.....	34	170 F	28,000	Cath.	
St. Vincent College; Latrobe, Pa.	1885	Sister M. Rachael.....	55	518 F	39,332	Cath.	
Salem Academy; Winston-Salem, N. C.	1846	V. Rev. V. J. Flynn.....	120	1,776 M	42,952	Cath.	335,573
San Diego State College; San Diego, Calif.	1877	Rt. Rev. D. Strittmatter.....	40	800 M	74,000	Cath.	1,000,000
San Francisco, University of; Calif.	1897	D. H. Gramley.....	39*	332 Ft	37,500	Morav.	
San Francisco College for Women; Calif.	1855	Harnon Lowman.....	118	2,083 C	65,000	State.	
San Jose State College; Calif.*	1857	W. R. Hepner.....	221	4,101 C	130,000	State.	
San Rafael, Dominican College of; San Rafael, Calif.	1891	Rev. W. J. Dunne.....	97	3,417 M†	80,000	Cath.	
Santa Clara, University of; Calif.	1851	Mother L. Mejia.....	45	408 F	100,003	Cath.	2,000,000
Sarah Lawrence College; Bronxville, N. Y.	1926	J. P. Leonard.....	260*	3,868 C	69,125	State.	
Scarritt College for Christian Workers; Nashville, Tenn.	1892	T. W. MacQuarrie.....	400	7,259 C	126,283	State.	
Seranton, University of; Pa.	1883	Sister M. Patrick.....	37	306 F	40,000	Cath.	
Scripps College; Claremont, Calif.	1925	Rev. W. C. Gianera.....	86	1,240 M	65,000	Cath.	750,000
Seattle Pacific College; Wash.	1891	Harold Taylor.....	55	352 Ft	54,440	Priv.	300,000
		H. C. Stuntz.....	18	135 C	500,000	Meth.	550,000
		V. Rev. J. E. Gallery.....	61	2,726 M†	30,000	Cath.	
		Frederick Hard.....	25	217 F	38,571	Priv.	1,539,478
		C. H. Watson.....	46	693 C	26,030	Meth.	459,099

Institution and location	Founded	Chief executive	Faculty	Students	Vols. in library	Control	Endowment
Seattle University; Wash.....	1891	V. Rev. A. A. Lemieux.....	124	2,651 C	40,000	Cath.....	
Seneca, Colleges of; Geneva, N. Y.....	1822	A. W. Brown.....	65	1,111 Cg ²⁴	81,051	Priv.....	735,000
Selon Hall University; South Orange, N. J.....	1862	Rt. Rev. J. L. McNulty.....	300	7,627 M†	103,290	Cath.....	500,000
Selon Hill College; Greensburg, Pa.....	1883	W. G. Ryan.....	49	412 F	33,500	Cath.....	
Shaw University; Raleigh, N. C.....	1865	W. R. Strasser.....	49*	785 C	17,000	Priv.....	10,000
Shepherd State College; Shepherdstown, W. Va.....	1871	C. S. Ikenberry.....	33	556 C	20,000	State.....	555,000
Shurtle College; Rome, Ga.....	1873	C. W. Burris.....	30	236 F	26,250	Bapt.....	
Siena Heights College; Adrian, Mich.....	1919	Mother M. Gerald.....	29	347 F	29,800	Cath.....	
Simmons College; Boston, Mass.....	1899	Bancroft Beatty.....	92	1,347 F†	100,000	Priv.....	3,707,259
Simpson College; Indianola, Iowa.....	1860	E. E. Voigt.....	47	668 C	37,188	Meth.....	1,530,000
Skidmore College; Saratoga Springs, N. Y.....	1911	H. T. Moore.....	87	1,132 F†	66,123	Priv.....	1,090,327
Smith College; Northampton, Mass.....	1875	B. F. Wright.....	270	2,312 F	360,000	Priv.....	3,052,350
South, University of the; Seawane, Tenn.....	1857	Boyston Green.....	45	480 M	66,328	Episc.....	
South Carolina, University of; Columbia.....	1801	N. M. Smith.....	185	2,122 C	212,625	State.....	9,000,000
South Carolina State A and M College; Orangeburg.....	1896	J. I. Washington.....	150	2,334 C	29,544	State.....	
South Dakota, University of; Vermillion.....	1882	I. D. Weeks.....	130	1,750 C	134,000	State.....	
South Dakota School of Mines and Technology; Rapid City.....	1885	W. E. Wilson.....	45	553 C	25,000	State.....	100,000
South Dakota State College of A and M Arts; Brookings.....	1881	F. H. Leimbach.....	119	2,257 C	96,666	State.....	832,303
Southeast Missouri State College; Cape Girardeau.....	1873	W. W. Parker.....	68	1,319 C	90,030	State.....	
Southeastern Louisiana College; Hammond.....	1925	G. J. Tinsley.....	97*	1,054 C	39,068	State.....	
Southeastern State College; Durant, Okla.....	1909	T. T. Montgomery.....	75	1,138 C	42,838	State.....	
Southern California, University of; Los Angeles.....	1880	F. D. Fagg.....	2,191	17,106 C	550,000	Priv.....	2,169,962
Southern Illinois University; Carbondale.....	1874	D. W. Morris.....	195	2,802 C	119,234	State.....	
Southern Methodist University; Dallas, Tex.....	1911	Umphrey Lee.....	270	7,025 C	283,928	Meth.....	5,109,000
Southern Oregon College of Education; Ashland.....	1926	E. N. Stevenson.....	45	726 C	22,000	State.....	
Southern State Teachers College; Springfield, S. Dak.....	1881	J. H. Kramer.....	26	318 C	16,000	State.....	
Southern University and A and M College; Baton Rouge, La.....	1914	F. G. Clark.....	147	1,785 C	45,605	State.....	
Southwest Missouri State College; Springfield, Mo.....	1906	Roy Ellis.....	125	1,877 C	70,000	State.....	
Southwest Texas State Teachers College; San Marcos, Tex.....	1901	J. G. Flowers.....	96	2,092 C	71,050	State.....	
Southwestern at Memphis; Tenn.....	1848	P. N. Rhodes.....	54	601 C	60,000	Presb.....	2,581,938
Southwestern College; Winfield, Kans.....	1885	A. W. Murray.....	42	615 C	28,500	Meth.....	600,000
Southwestern Louisiana Institute; Lafayette.....	1898	J. L. Fletcher.....	177	2,537 C	90,000	State.....	
Southwestern State College; Weatherford, Okla.....	1901	R. H. Burton.....	72	931 C	40,289	State.....	
Southwestern University; Georgetown, Tex.....	1840	W. C. Finch.....	54	585 C	60,000	Meth.....	1,109,000
Spelman College; Atlanta, Ga.....	1881	Florence M. Read.....	33	375 F	102,419	Priv.....	3,291,000
Spring Hill College; Mobile, Ala.....	1830	V. Rev. P. Donnelly.....	45	730 M	45,000	Cath.....	450,000
Springfield College; Springfield, Mass.....	1885	P. M. Limbert.....	73	1,465 M†	38,536	Priv.....	1,072,132
Stanford University; Stanford, Calif.....	1885	Wallace Sterling.....	500	7,433 C	1,070,000	Priv.....	38,424,326
Stephen F. Austin State College; Nacogoches, Tex.....	1923	P. L. Boynton.....	70	1,598 C	38,000	State.....	
Stevens Institute of Technology; Hoboken, N. J.....	1870	H. N. Davis.....	95	1,904 M†	35,000	Priv.....	2,265,000
Stout Institute; Menomonee, Wis.....	1903	V. C. Fryklund.....	60	903 C	33,306	State.....	
Stowe Teachers College; St. Louis, Mo.....	1890	Ruth Harris.....	36	316 C	16,000	State.....	
Sul Ross State College; Alpine, Tex.....	1920	R. M. Hawkins.....	58	1,024 C	32,000	State.....	
Susquehanna University; Selinsgrove, Pa.....	1856	G. M. Smith.....	38	499 C	31,000	Luth.....	503,000
Swarthmore College; Swarthmore, Pa.....	1864	J. W. Nason.....	80	920 C	157,314	Friends.....	9,899,793
Sweet Briar College; Sweet Briar, Va.....	1901	Anne G. Pannell.....	55	454 F	72,113	Priv.....	983,097

Syracuse University; N. Y. ²⁹	1870	W. P. Tolley	1,200	15,724 C	358,349	Priv.	6,658,230
Talladega College; Talladega, Ala.	1867	A. D. Beittel	40	315 C	35,000	Cong.	1,188,732
Tarkio College; Tarkio, Mo.	1883	M. E. Collins	25	410 C	21,000	Presb.	705,000
Taylor University; Upland, Indiana	1846	C. W. Meredith	38	595 C	26,272	Priv.	100,000
Temple University; Philadelphia, Pa.	1884	R. L. Johnson	533	8,076 C	307,058	Priv.	1,494,220
Tennessee University of Knoxville and Memphis	1794	C. E. Brehm	502	6,382 C	324,287	State	
Tennessee Agr. and Ind. State College; Nashville	1909	W. S. Davis	183	1,909 C	30,000	State	
Tennessee Polytechnic Institute; Cookeville	1915	Everett Derryberry	100	2,000 C	40,000	State	
Texas, A. and M. College of; College Station ²⁸	1876	M. T. Harrington	564	6,725 M	156,000	State	466,000
Texas, University of; Austin ²⁸	1881	T. S. Painter	930	14,373 C	938,321	State	5,676,552
Texas Christian University; Fort Worth	1873	M. E. Sadler	198	4,500 C	150,000	Dis. of Ch.	6,500,000
Texas College of Arts and Industries; Kingsville	1925	E. H. Poveat	103	2,036 C	47,790	State	
Texas State College for Women; Denton	1901	J. A. Guinn	153	1,790 F	106,000	State	
Texas State University; Houston	1947	R. O'Hara Lanier	139	1,198 C	33,809	State	
Texas Technological College; Lubbock	1923	D. M. Wiggins	342	5,463 C	82,130	State	
Texas Western College; El Paso	1913	W. H. Elkins	112	2,159 C	52,000	State	
Thiel College; Greenville, Pa.	1870	W. F. Zimmermann	38	635 C	28,000	State	
Toledo, University of; Ohio	1877	W. H. Jones	40	702 C	23,000	Priv.	427,892
Tougaloo College; Tougaloo, Miss. [*]	1872	W. W. White	185	4,817 C	150,943	City	231,713
Transylvania College; Lexington, Ky.	1869	H. C. Warren	31	360 C	17,870	Cong.	1,500,000
Trinity College; Hartford, Conn.	1780	R. F. McLain	38	377 C	44,075	Priv.	45,500
Trinity College; Washington, D. C.	1823	G. K. Funston	74	906 Mt	210,000	Priv.	850,000
Trinity University; San Antonio, Tex.	1897	Sister C. Dorothea	59	478 F	52,000	Cath.	4,157,000
Tufts College; Medford, Mass.	1869	M. G. Everett	80	1,132 C	46,000	Presb.	600,000
Tulane University; New Orleans, La. ²⁸	1852	Leonard Carmichael	585	3,205 C ²¹	200,000	Priv.	9,904,304
Tulsa, University of; Okla.	1834	R. C. Harris	455	4,477 C	340,000	Priv.	14,272,547
Tusculum College; Greeneville, Tenn.	1894	C. I. Pontius	200	4,592 C	111,847	Presb.	3,000,000
Tuskegee Institute; Tuskegee Institute, Ala.	1794	L. K. Patton	24	319 C	23,728	Presb.	818,346
Union College; Barbourville, Ky. [*]	1881	F. D. Patterson	220	1,806 C	90,000	Priv.	6,912,396
Union College; Lincoln, Neb.	1879	Conway Boatman	27	502 C	19,845	Meth.	595,651
Union College; Schenectady and Albany, N. Y.	1891	H. C. Hartman	48	857 C	47,506	Advent.	
Union University; Jackson, Tenn.	1795	Carfer Davidson	120	1,202 M	135,000	Priv.	8,000,000
U. S. Coast Guard Academy; West Point, N. Y.	1834	W. F. Jones	30	479 C	21,000	Bapt.	525,000
U. S. Military Academy; New London, Conn.	1876	Adm. A. G. Hall	55	425 M	33,500	Govt.	
U. S. Naval Academy; Annapolis, Md.	1802	Gen. B. E. Moore	272	2,496 M	160,000	Govt.	
Upsala College; East Orange, N. J.	1845	Adm. H. W. Hill	526	3,600 M	113,600	Govt.	500,000
Ursinus College; Collegeville, Pa.	1893	E. B. Lawson	73	1,676 C	30,000	Luth.	1,000,000
Ursuline College for Women; Cleveland, Ohio	1869	N. E. McClure	58	948 C	41,000	Evangel. and Ref.	
Utah, University of; Salt Lake City	1871	Mother M. C. Ahearn	31	223 F	25,000	Cath.	191,540
Utah State Agricultural College; Logan	1850	A. R. Olpin	500	7,648 C	235,000	State	
Valdosta State College; Valdosta, Ga.	1888	L. L. Madsen	504	3,915 C	142,000	State	
Valparaiso University; Valparaiso, Ind.	1906	J. R. Thaxton	22	321 C	27,960	State	
Vanderbilt University; Nashville, Tenn.	1859	O. P. Kretzmann	118	1,900 C	58,479	Luth.	442,033
Vassar College; Poughkeepsie, N. Y.	1875	Havvie Branscomb	246	3,191 C	515,853	Priv.	31,255,786
Vermont, University of and State Agri. Coll.; Burlington	1861	Sarah G. Blanding	191	1,370 F	263,134	Priv.	15,738,000
Villa Maria College; Erie, Pa. [*]	1791	W. S. Carlson	233	2,920 C	200,000	Priv. and St.	4,433,000
Villanova College; Villanova, Pa.	1925	Mother M. Aurelia	33	300 F	17,000	Cath.	1,000,000
	1842	Rev. F. X. N. McGuire	145	2,300 M	85,069	Cath.	4,326,029

Institution and location	Founded	Chief executive	Faculty	No. of students	Vols. in library	Control	Endowment
Virginia, University of; Charlottesville, Va.	1819	C. W. Darden, Jr.	381	4,752 MF ³³	592,390	State	15,000,000
Virginia Military Institute; Lexington	1839	R. J. Marshall	80	785 M	87,185	State	500,000
Virginia Polytechnic Institute; Blacksburg ³⁴	1872	W. S. Newman	381	4,255 C	135,397	State	
Virginia State College; Petersburg	1882	R. P. Daniel	169	2,491 C	48,000	State	
Virginia Union University; Richmond	1865	J. M. Ellison	65	925 C	30,000	Bapt.	1,000,000
Wabash College; Crawfordsville, Ind.	1832	F. H. Sparks	54	558 M	100,000	Priv.	2,078,000
Wagner Mem. Luth. College; Staten Island, N. Y.	1883	W. C. Langsam	77	936 C	37,089	Priv.	423,000
Wake Forest College; Wake Forest, N. Car.	1834	H. W. Tribble	220	2,015 C	109,092	Bapt.	4,520,103
Walla Walla College; College Place, Wash.	1892	G. W. Bowers	56	1,150 C	32,200	Advent.	
Warburg College; Waverly, Iowa	1852	C. H. Becker	43	546 C	28,000	Luth.	213,546
Washburn Municipal University; Topeka, Kans.	1865	B. S. Stoffer	89	1,292 C	69,750	City	1,440,649
Washington, State College of; Pullman	1890	Wilson Compton	461	6,567 C	600,000	State	15,838,260
Washington, University of; Seattle	1861	R. B. Allen	1,200	13,966 C	706,936	State	2,768,563
Washington and Jefferson College; Washington, Pa.	1780	B. C. Patterson	50	700 M	72,000	Priv.	1,423,521
Washington and Lee University; Lexington, Va.	1749	F. P. Gaines	85	1,256 M	165,000	Priv.	5,976,000
Washington College; Chestertown, Md.	1782	D. Z. Gibson	33	441 C	42,000	Priv.	92,000
Washington Missionary College; Washington, D. C.	1853	A. H. Shephard	35	480 C	36,500	Advent.	28,215,000
Washington University; St. Louis, Mo.	1853	A. H. Compton	476	7,090 C	327,309	Priv.	
Wayne University; Detroit, Mich.	1868	D. D. Henry	559	8,709 C	380,000	City	
Wellesley College; Wellesley, Mass.	1870	Margaret Clapp	210	1,711 F	269,356	Priv.	17,145,483
Wells College; Aurora, N. Y.	1868	J. H. Bentley	46	309 F	108,527	Priv.	2,155,793
Wesleyan College; Macon, Ga.	1836	Silas Johnson	72	473 F	38,900	Meth.	1,500,000
Wesleyan University; Middletown, Conn.	1831	V. L. Butterfield	98	914 M	361,344	Priv.	9,000,000
West Liberty State College; W. Liberty, W. Va.	1837	P. N. Elbin	34	545 C	22,000	State	
West Texas State College; Canyon, Texas	1910	J. P. Cornette	83	1,269 C	56,463*	State	
West Virginia State College; Institute, W. Va.	1891	J. W. Davis	64	1,508 C	36,674	State	125,300
West Virginia University; Morgantown and Keyser, W. Va.	1867	Irvin Stewart	401	5,357 C	202,167	State	235,000
West Virginia Wesleyan College; Buckhannon	1889	W. J. Scarborough	41	805 C	35,000	Meth.	
Western Carolina Teachers College; Cullowhee, N. Car.	1890	P. A. Reid	55	550 C	23,475	State	805,305
Western College for Women; Oxford, Ohio	1853	F. E. Henderson	50	427 F	46,500	Priv.	
Western Illinois State College; Macomb, Ill.	1899	P. A. Beu	115	1,541 C	58,620	State	
Western Kentucky State College; Bowling Green	1906	P. L. Garrett	110	1,775 C	80,000	State	1,151,632
Western Maryland College; Westminster	1867	L. S. Ensor	55	825 C	43,907	Meth.	
Western Michigan College of Education; Kalamazoo	1897	P. V. Sangren	298	3,855 C	82,350	State	
Western Montana College of Education; Dillon	1903	Rush Jordan	20	260 C	23,500	State	20,254,738
Western Reserve University; Cleveland, Ohio ³⁵	1826	J. S. Mills	900	4,960 C	647,000	Priv.	
Western State College of Colorado; Gunnison	1891	P. P. P. Mickelson	55	658 C	41,057	State	
Western Washington Coll. of Education; Bellingham	1851	W. W. Haggard	95	1,501 C	74,000	State	500,000
Westminster College; Fulton, Mo.	1851	W. W. Hall, Jr.	31	505 M	35,000	Presb.	987,632
Westminster College; New Wilmington, Pa.	1852	W. W. Orr	84	1,142 C	79,659	Presb.	150,000
Westminster College; Salt Lake City, Utah	1875	R. D. Steele	24	300 C	15,500	Presb.	1,260,000
Wheaton College; Norton, Mass.	1834	A. H. Meneely	65	500 F	65,384	Priv.	810,000
Wheaton College; Wheaton, Ill.	1860	V. R. Edman	125	1,493 C	95,651	Priv.	
Wheelock College; Boston, Mass.	1889	Winifred E. Bain	22	375 F	12,500	Priv.	
Whitman College; Walla Walla, Wash.	1859	C. C. Maxey	44	780 C	83,454	Priv.	1,517,021

Approved United States Medical Schools

Source: American Medical Association

Name of school, by state	Location	Chief Executive	1951 premedical requirements (by years)	No. of students, 1940-50	1950 graduates (to June 30)
Medical College of Alabama.....	Birmingham, Ala.....	Dr. Tinsley R. Harrison, Acftg. Dean.....	3	210	51
University of Arkansas School of Medicine.....	Little Rock, Ark.....	Dr. Hayden C. Nicholson, Dean.....	3	323	69
University of California School of Medicine.....	San Francisco, Calif.....	Dr. Francis Scott Smyth, Dean.....	3	291	75
College of Medical Evangelists.....	Loma Linda, ¹ Calif.....	Dr. Harold Shryock, Dean.....	4	359	73
University of Southern California School of Medicine.....	Los Angeles, Calif.....	Dr. Burrell O. Raulston, Dean.....	3	267	60
Stanford University School of Medicine.....	San Francisco, Calif.....	Dr. Loren R. Chandler, Dean.....	3	240	60
University of Colorado School of Medicine.....	Denver, Colo.....	Dr. Robert C. Lewis, Dean.....	3	277	67
Yale University School of Medicine.....	New Haven, Conn.....	Dr. C. N. Hugh Long, Dean.....	3	248	45
Georgetown University School of Medicine.....	Washington, D. C.....	Rev. Paul A. McNally, Dean.....	Degree ¹	414	82
George Washington University School of Medicine.....	Washington, D. C.....	Dr. Walter A. Bloedorn, Dean.....	3	333	78
Howard University College of Medicine.....	Washington, D. C.....	Dr. Joseph L. Johnson, Dean.....	2	281	62
Medical College of Georgia.....	Augusta, Ga.....	Dr. G. Lombard Kelly, President.....	3	311	79
Emory University School of Medicine.....	Emory University, Ga.....	Dr. R. Hugh Wood, Dean.....	3	266	55
Chicago Medical School.....	Chicago, Ill.....	Dr. John J. Sheinin, President.....	Degree	257	44
Northwestern University Medical School.....	Chicago, Ill.....	Dr. Richard H. Young, Dean.....	3	525	131
Stritch School of Medicine of Loyola University.....	Chicago, Ill.....	Dr. John F. Sheehan, Acftg. Dean.....	3	323	68
University of Chicago, The School of Medicine.....	Chicago, Ill.....	Dr. Lowell T. Coggeshall, Dean.....	3	254	57
University of Illinois College of Medicine.....	Chicago, Ill.....	Dr. Stanley W. Olson, Dean.....	3	656	161
Indiana University School of Medicine.....	Bloomington, ³ Ind.....	Dr. John D. Van Nuys, Dean.....	3	492	93
State University of Iowa College of Medicine.....	Iowa City, Iowa.....	Dr. Willis Marlon Fowler, Chmn.....	3	338	70
University of Kansas School of Medicine.....	Lawrence, ⁴ Kans.....	Dr. Franklin D. Murphy, Dean.....	3 ^s	348	83
University of Louisville School of Medicine.....	Louisville, Ky.....	Dr. J. Murray Kinsman, Dean.....	3	367	90
University of Louisiana School of Medicine.....	New Orleans, La.....	Dr. William W. Frye, Dean.....	3	391	68
Louisiana State Univ. School of Medicine.....	New Orleans, La.....	Dr. Maxwell E. Lapham, Dean.....	3	505	118
Tulane University of Louisiana School of Medicine.....	Baltimore, Md.....	Dr. Alan M. Chesney, Dean.....	Degree	296	71
Johns Hopkins University School of Medicine.....	Baltimore, Md.....	Dr. H. Boyd Wylie, Dean.....	3	362	80
University of Maryland School of Med. & Coll. of Phys. and Surg.....	Boston, Mass.....	Dr. James M. Faulkner, Dean.....	3	256	53
Boston University School of Medicine.....	Boston, Mass.....	Dr. George Packer Berry, Dean.....	3	500	133
Harvard Medical School.....	Boston, Mass.....	Dr. Dwight O'Hara, Dean.....	Degree	403	102
Tufts College Medical School.....	Ann Arbor, Mich.....	Dr. A. C. Furstenberg, Dean.....	3	493	92
University of Michigan Medical School.....	Detroit, Mich.....	Dr. Gordon H. Scott, Dean.....	3	255	58
Wayne University College of Medicine.....	Minneapolis, Minn.....	Dr. Harold S. Diehl, Dean.....	3	458	87
University of Minnesota Medical School.....	St. Louis, Mo.....	Dr. Melvin A. Casberg, Dean.....	4	456	103
St. Louis University School of Medicine.....	St. Louis, Mo.....	Dr. Robert A. Moore, Dean.....	3	356	85
Washington University School of Medicine.....	Omaha, Neb.....	Dr. Percy J. Carroll, Dean.....	3	283	63
Creighton University School of Medicine.....	Omaha, Neb.....	Dr. Harold C. Luehl, Dean.....	3	334	76
University of Nebraska College of Medicine.....	Albany, N. Y.....	Dr. Robert S. Cunningham, Dean.....	3	189	52
Albany Medical College.....	Brooklyn, N. Y.....	Dr. Jean A. Curran, President.....	3	442	92
State Univ. of New York, Long Island U., College of Medicine.....	Buffalo, N. Y.....	Dr. Stockton Kimball, Dean.....	3	279	72
University of Buffalo School of Medicine.....					

Approved United States Medical Schools (Cont.)

Name of school, by state	Location	Chief Executive	1951 premedical requirements (by years)	No. of students, 1940-50	1950 graduates (to June 30)
Columbia University Coll. of Physicians and Surgeons.....	New York, N. Y.	Dr. Willard C. Rappleye, Dean.....	3	442	104
Cornell University Medical College.....	New York, N. Y.	Dr. Joseph C. Hinsey, Dean.....	3 ^s	326	78
New York Medical College, Flower and Fifth Ave. Hospitals.....	New York, N. Y.	Dr. J. A. W. Hetrick, Dean.....	Degree	466	98
New York University College of Medicine.....	New York, N. Y.	Dr. Currier McEwen, Dean.....	3	501	118
University of Rochester School of Medicine and Dentistry.....	Rochester, N. Y.	Dr. George H. Whipple, Dean.....	3	271	67
State University of N. Y., Medical Center at Syracuse University; School of Medicine.....	Syracuse, N. Y.	Dr. Herman G. Weiskotten, Dean.....	3	209	38
Duke University School of Medicine.....	Durham, N. C.	Dr. Wilburt C. Davison, Dean.....	3	297	72
Bowman Gray School of Medicine of Wake Forest College.....	Winston-Salem, N. C.	Dr. C. C. Carpenter, Dean.....	3	211	41
University of Cincinnati Coll. of Medicine.....	Cincinnati, Ohio	Dr. Stanley Dorst, Dean.....	3	337	76
Western Reserve University School of Medicine.....	Cleveland, Ohio	Dr. Joseph T. Wear, Dean.....	3	332	91
Ohio State University College of Medicine.....	Columbus, Ohio	Dr. Charles A. Doan, Dean.....	3	318	68
University of Oklahoma School of Medicine.....	Oklahoma City, Okla.	Dr. Mark R. Everett, Dean.....	3	277	74
University of Oregon Medical School.....	Portland, Oreg.	Dr. D. W. E. Baird, Dean.....	3	274	58
Hahnemann Medical College and Hospital.....	Philadelphia, Pa.	Dr. Charles L. Brown, Dean.....	3	342	72
Jefferson Medical College.....	Philadelphia, Pa.	Dr. William Harvey Perkins, Dean.....	3	636	152
Temple University School of Medicine.....	Philadelphia, Pa.	Dr. William N. Parkinson, Dean.....	3	480	100
University of Pennsylvania School of Medicine.....	Philadelphia, Pa.	Dr. John McK. Mitchell, Dean.....	3	487	114
Woman's Medical College of Pennsylvania.....	Philadelphia, Pa.	Dr. Marion Fay, Dean.....	3	176	34
University of Pittsburgh School of Medicine.....	Pittsburgh, Pa.	Dr. William S. McElroy, Dean.....	3	334	70
Medical College of the State of South Carolina.....	Charleston, S. C.	Dr. Kenneth Merrill Lynch, President.....	3	231	57
University of Tennessee College of Medicine.....	Memphis, Tenn.	Dr. O. W. Hyman, Dean.....	3	578	143
Meharry Medical College.....	Nashville, Tenn.	Dr. Murray C. Brown, Director.....	2	245	60
Vanderbilt University School of Medicine.....	Nashville, Tenn.	Dr. John B. Youmans, Dean.....	Degree	205	48
Southwestern Medical School of the University of Texas.....	Dallas, Texas	Dr. Carl A. Moyer, Dean.....	3	281	56
University of Texas School of Medicine.....	Galveston, Texas	Dr. Chauncey D. Leake, Vice Pres.....	3	452	93
Baylor University College of Medicine.....	Houston, Texas	Dr. Walter H. Moursund, Dean.....	3	327	73
University of Utah School of Medicine.....	Salt Lake City, Utah	Dr. H. L. Marshall, Actg. Dean.....	3	200	52
University of Vermont College of Medicine.....	Burlington, Vt.	Dr. William Eustis Brown, Dean.....	3	162	36
University of Virginia Department of Medicine.....	Charlottesville, Va.	Dr. Vernon W. Lippard, Dean.....	3	276	59
Medical College of Virginia.....	Richmond, Va.	Dr. Harvey B. Haag, Dean.....	3	354	92
University of Washington School of Medicine.....	Seattle, Wash.	Dr. Edward L. Turner, Dean.....	3	211	44
University of Wisconsin Medical School.....	Madison, Wis.	Dr. William S. Middleton, Dean.....	3	306	73
Marquette University School of Medicine.....	Milwaukee, Wis.	Dr. John S. Hirschboeck, Dean.....	3	364	84
Totals.....				24,547	5,553

¹ Another branch is located at Los Angeles; Dr. William F. Norwood is Dean. ² 90 semester hours for veterans. ³ Another branch is located at Indianapolis.

* Another branch is located at Kansas City. ⁴ Plus degree.

The College Fraternity System

THE COLLEGE fraternity system is as old as the republic in which it serves. It was on the night of December 5, 1776, in the Apollo Room of the Raleigh Tavern in Williamsburg, Virginia, that John Heath, Richard Booker, Thomas Smith, Armistead Smith and John Jones of the College of William and Mary (the second oldest college in the country) formed the first Greek-letter society, Phi Beta Kappa, whose letters stand for a Greek motto usually translated as "Love of Wisdom (or Philosophy), the guide of life." The society prospered and adopted all the features which characterize the modern fraternity: a ritual with secret obligations, a motto and a grip. By 1826, the fraternity became honorary and in 1875 it became a society when the first women members were elected. Today it has a membership in the neighborhood of 110,090, the largest in the U. S.

Kappa Alpha Society was established at Union College, Schenectady, New York, in the fall of 1825. It, in turn, was followed by the establishment at the same institution of Sigma Phi and Delta Phi, both in 1827, and these three were known as the "Union Triad." In later years, three other fraternities came into existence at Union College and were responsible for that college earning its sobriquet as the "Mother of Fraternities."

The first Greek-letter sorority was Kappa Alpha Theta, founded at De Pauw University in January, 1870, although other non-Greek-letter sororities had preceded it. The Adelphean Society was founded in 1851 at Wesleyan College in Georgia; the Philomathean Society was founded in 1852 at the same school and the I. C. Sororis was born in 1867 at Monmouth College. These three societies later adopted Greek letters. Adelphean became Alpha Delta Pi; Philomathean became Phi Mu and I. C. Sororis adopted Pi Beta Phi.

These organizations marked the beginning of the fraternal system, but the real expansion came after 1900. The growth since that date has been tremendous.

Fraternities (and sororities) are divided into three groups: social or academic, professional and honor groups. These groups have their own interfraternity associations which originally were founded to dispel the clannish bitterness and rivalry between the fraternities and to try to eradicate the antagonism and prejudice of public opinion against the fraternity system and its abuses. It is to the credit of these institutions that most of the evils have been overcome.

On October 9-10, 1943, these interfraternity associations gathered in New York

and formed the *National Conference of College Fraternities and Societies*, which drew up a constitution for the purpose of defining the various groups and setting up rules and regulations for the member bodies.

The member bodies of the National Conference of College Fraternities and Societies, whose President is Dean Joseph A. Park, Ohio State University, Columbus 10, Ohio, are as follows:

The *National Interfraternity Conference (NIC)*, founded in New York City on November 18, 1909. It has a membership of 59 social fraternities, and its chairman is William J. Barnes, 20 Exchange Pl., New York 5, N. Y.

The *National Panhellenic Conference (NPC)*, a group of social sororities with an original membership of 20. Its chairman is Mrs. E. Granville Crabtree, 85 Dean Rd., Brookline 46, Mass.

On November 13, 1947, the *Association of Educational Sororities (AES)*, with its membership of 6 sororities, dissolved and joined the NPC. Five other groups were also accepted by the NPC at that time, bringing its strength up to 31.

The *Professional Interfraternity Conference (PIC)* was organized on March 2, 1928, in Washington, D. C. It has a membership of 28 men's professional fraternities, and its President is R. W. Lemley, 134 N. La Salle St., Chicago 2, Illinois.

The *Professional Panhellenic Association (PPA)* was founded in 1925. It has a membership of 15 sororities, and its President is Mrs. John B. Davison, 1009 25th St., Des Moines 11, Iowa.

The *Association of College Honor Societies (ACHS)*, which was founded in New York on October 2, 1925. It has a membership of 20 nonsocial fraternities, and its President is Dean Robert W. Bishop, University of Cincinnati, Cincinnati 21, Ohio.

Not belonging to this group is the independent *Association of Social Fraternities (ASF)* with a membership of 2.

Further information concerning the vital statistics of the various fraternities and sororities, their membership, number of active chapters, date of founding and list of officers, may be found in the following publications:

1. The annual directory issue (first month in the year) of *The Fraternity Month*, Published by Leland Publishers Inc., St. Paul 4, Minnesota.

2. *Banta's Greek Exchange*, published by George Banta Publishing Co., Menasha, Wisconsin.

Leading Daily U. S. Newspapers

Source: A.B.C. Publishers' statements for 6-month period ending March 31, 1950.

(NOTE: Where two or more newspapers are listed under a city, the order is according to size of total daily circulation.)

City and newspaper	Net Paid Circulation		
	Morning ¹	Evening ²	Sunday
Atlanta: JOURNAL.....	.....	248,791 ²	316,068
Baltimore: SUN.....	171,733 ²	194,964 ²	309,973
NEWS-POST (E); AMERICAN (S).....	.....	227,091 ²	351,431
Birmingham: AGE HERALD (M); NEWS (E); NEWS & AGE HERALD (S).....	44,144 ²	168,305 ²	201,385
Boston: RECORD (M); AMERICAN (E); ADVERTISER (S).....	383,574	194,190	666,003
HERALD (M & S); TRAVELER (E).....	128,112	217,379	247,736
POST.....	311,979	.....	262,227
GLOBE.....	127,697	167,029	398,685
Buffalo: NEWS.....	.....	281,721 ²	.....
Chicago: TRIBUNE.....	923,517 ²	.....	1,575,465
SUN-TIMES.....	621,209 ²	.....	700,341
HERALD-AMERICAN.....	.....	544,118 ²	1,047,522
NEWS.....	.....	532,483 ²	.....
Cleveland: PRESS.....	.....	293,690 ²	.....
PLAIN DEALER.....	285,498 ²	.....	513,327
Denver: POST.....	.....	226,866 ²	359,288
Detroit: NEWS.....	.....	453,684 ²	565,658
TIMES.....	.....	422,880 ²	617,345
FREE PRESS.....	416,064 ²	.....	472,380
Des Moines: REGISTER (M & S); TRIBUNE (E).....	221,665 ²	150,386 ²	540,192
Fort Worth: STAR-TELEGRAM.....	113,924 ²	113,600 ²	204,612
Kansas City (Mo.): TIMES (M); STAR (E & S).....	357,045 ²	365,766 ²	379,882
Los Angeles: TIMES.....	394,134 ²	.....	794,163
HERALD & EXPRESS.....	.....	348,543	.....
EXAMINER.....	347,467 ²	.....	807,968
DAILY NEWS.....	260,857 ^{2,3}	.....	.....
Louisville (Ky.): COURIER-JOURNAL (M & S); TIMES (E).....	190,398 ²	169,884 ²	286,538
Milwaukee: JOURNAL.....	.....	325,039 ²	431,610
Minneapolis: TRIBUNE (M & S); STAR (E).....	180,397 ²	295,513 ²	603,778
Newark: NEWS.....	.....	257,556	211,856
New York: NEWS.....	2,241,886	.....	4,322,304
MIRROR.....	1,031,989	.....	2,085,722
JOURNAL & AMERICAN.....	.....	734,436	1,186,439
WORLD-TELEGRAM & SUN.....	.....	612,468	.....
TIMES.....	544,974	.....	1,173,764
POST.....	.....	384,750	291,037
HERALD TRIBUNE.....	340,905	.....	675,105
Oklahoma City: OKLAHOMAN (M & S); TIMES (E).....	140,021 ²	112,442 ²	251,963
Omaha: WORLD-HERALD.....	128,336 ²	115,575 ²	246,524
Philadelphia: BULLETIN.....	.....	723,589	697,929
INQUIRER.....	655,644	.....	1,151,771
Pittsburgh: PRESS.....	.....	282,081 ²	496,796
POST-GAZETTE.....	270,023 ²	.....	.....
SUN-TELEGRAPH.....	.....	206,609 ²	566,741
Portland: OREGONIAN.....	219,442 ²	276,810	.....
Richmond (Va.): TIMES-DISPATCH (M & S); NEWS-LEADER (E).....	122,844 ²	99,078 ²	168,496
Rochester: DEMOCRAT & CHRONICLE (M & S); TIMES-UNION (E).....	108,688 ²	111,967 ²	163,952
St. Louis: GLOBE-DEMOCRAT.....	286,718	.....	379,155
POST-DISPATCH.....	.....	285,814	436,325
St. Paul: PIONEER PRESS (M & S); DISPATCH (E).....	94,405 ²	118,109 ²	159,145
San Francisco: EXAMINER.....	221,406 ²	.....	588,500
Seattle: TIMES.....	.....	211,935 ²	242,531
Washington (D. C.): TIMES HERALD.....	275,314 ²	.....	304,545
EVENING STAR; SUNDAY STAR.....	223,547 ²	.....	250,668

¹ Unless otherwise indicated, figure is an average of the Monday-through-Friday circulation; that is, Saturday circulation, if any, has not been used in making the average. ² Figure is an average of the Monday-through-Saturday circulation. ³ Published all day.

English Language Daily and Sunday U. S. Newspapers

(as of Sept. 30, 1949)

Source: Editor & Publisher.

State	Morning papers & circulation		Evening papers & circulation		Total M & E & circulation		Sunday papers & circulation	
Alabama.....	3	136,665	16	439,503	19	576,168	11	451,433
Arizona.....	5	89,247	8	78,942	13	168,189	4	115,645
Arkansas.....	5	139,450	29	192,406	34	331,856	10	285,334
California.....	23	1,563,261	96	2,398,665	119	3,961,926	25	3,247,169
Colorado.....	5	148,789	22	347,359	27	496,148	8	571,364
Connecticut.....	6	149,592	20	468,509	26	618,101	7	422,159
Delaware.....	1	21,314	1	60,301	2	81,615	1	21,355
D. C.....	2	322,479	3	473,754	5	796,233	3	695,308
Florida.....	10	508,039	27	391,219	37	899,258	25	760,462
Georgia.....	5	305,754	23	433,324	28	739,078	12	744,347
Idaho.....	4	59,078	11	67,726	15	126,804	5	89,607
Illinois.....	9	1,456,737	78	2,267,791	87	3,724,528	17	3,788,819
Indiana.....	14	444,597	79	1,073,746	93	1,518,343	17	874,448
Iowa.....	2	276,757	41	630,691	43	907,448	7	771,024
Kansas.....	4	165,611	51	460,503	55	626,114	12	415,498
Kentucky.....	9	253,097	24	368,334	33	621,431	15	452,918
Louisiana.....	6	282,602	15	355,495	21	638,097	8	446,749
Maine.....	5	171,452	5	71,872	10	243,324	3	178,268
Maryland.....	4	200,358	8	488,860	12	689,218	3	688,331
Massachusetts.....	7	1,100,659	47	1,483,689	54	2,584,348	11	1,858,080
Michigan.....	2	492,890	52	1,696,564	54	2,189,454	12	2,026,129
Minnesota.....	4	319,339	26	635,692	30	955,031	5	829,328
Mississippi.....	5	61,510	15	155,566	20	217,076	10	150,780
Missouri.....	8	754,118	48	1,096,819	56	1,850,937	11	1,332,003
Montana.....	5	84,584	12	57,492	17	142,076	9	129,515
Nebraska.....	4	174,114	17	260,036	21	434,150	6	322,125
Nevada.....	1	10,360	6	36,080	7	46,440	2	25,991
New Hampshire.....	1	25,964	8	76,427	9	102,391	1	27,726
New Jersey.....	6	296,084	22	809,669	28	1,105,753	10	562,085
New Mexico.....	3	36,074	14	84,229	17	120,303	10	82,221
New York.....	24	4,971,570	74	3,576,007	98	8,547,577	20	11,118,572
North Carolina.....	7	435,596	35	420,918	42	856,514	13	554,912
North Dakota.....	3	54,604	9	84,004	12	138,608	2	78,889
Ohio.....	10	726,004	90	2,370,598	100	3,096,602	19	1,874,148
Oklahoma.....	8	266,838	44	390,948	52	657,786	40	604,379
Oregon.....	4	237,235	18	328,818	22	566,053	7	538,198
Pennsylvania.....	27	1,381,613	101	2,639,792	128	4,021,405	15	3,189,369
Rhode Island.....	1	45,542	6	220,480	7	266,022	2	175,764
South Carolina.....	7	239,801	9	126,406	16	366,207	6	260,780
South Dakota.....	1	2,487	11	142,999	12	145,486	6	104,604
Tennessee.....	7	437,696	24	491,657	31	929,353	13	756,221
Texas.....	25	923,679	87	1,364,321	112	2,288,000	75	2,005,154
Utah.....	1	88,930	5	154,949	6	243,879	4	232,606
Vermont.....	2	43,746	8	43,886	10	87,632	1	11,650
Virginia.....	10	332,633	24	366,456	34	699,089	14	482,733
Washington.....	6	279,277	20	583,656	26	862,933	10	779,908
West Virginia.....	9	232,690	22	269,560	31	502,250	9	385,351
Wisconsin.....	3	223,088	36	772,572	39	995,660	6	846,223
Wyoming.....	6	31,046	4	31,611	10	62,657	4	33,286
Total U. S.....	329	21,004,650	1,451	31,840,901	1,780	52,845,551	546	46,398,968
Total U. S., Oct. 1, 1948.....	328	21,081,905	1,453	31,203,392	1,781	52,285,297	530	46,308,081
Total U. S., Oct. 1, 1947.....	328	20,762,317	1,441	30,910,959	1,769	51,673,276	511	45,151,319
Total U. S., Oct. 1, 1946.....	334	20,545,908	1,429	30,381,597	1,763	50,927,505	497	43,665,364
Total U. S., Oct. 1, 1945.....	330	19,239,913	1,419	29,144,275	1,749	48,384,188	485	39,860,036
Total U. S., Oct. 1, 1944.....	338	18,059,252	1,406	27,895,586	1,744	45,954,838	481	37,945,622
Total U. S., Oct. 1, 1933.....	333	17,077,722	1,421	27,315,107	1,754	44,392,829	467	37,291,832

The Leading Magazines of the United States

Source: A.B.C. Publishers' Statements for period ending June 30, 1950.

Magazine	Circulation*	Magazine	Circulation*
American Comic Group	2,887,377	Marvel Comic Group	5,653,019
American Home	2,813,804	Modern Screen	1,149,379
American Legion	3,027,896	National Comics Group	7,656,051
American Magazine	2,549,874	National Geographic Magazine	1,930,225
Archie Comic Group	3,607,027	Parents' Magazine	1,211,725
Better Homes & Gardens	3,460,401	Pathfinder	1,205,394
Collier's	3,161,048	Photoplay	1,200,163
Coronet	2,662,613	Popular Fiction Group	1,776,958
Cosmopolitan	1,972,631	Popular Mechanics	1,133,889
Dell Modern Group	2,471,183	Popular Science Monthly	1,108,967
Family Circle	2,028,662	Quality Comic Group	1,634,333
Fawcett Comics Group	3,807,688	Reader's Digest	†
Fawcett Screen Unit	1,163,293	Redbook Magazine	1,968,316
Fawcett Women's Group	2,603,694	Saturday Evening Post	4,069,220
Foreign Service	1,080,772	Screenland Unit	1,073,753
Good Housekeeping	3,010,883	Seventeen	1,003,532
Harvey Comics Group	3,342,278	Sport Men's Group	1,012,734
Harvey Girls Group	1,590,832	Standard Comics Group	1,820,660
Hillman Comic Group	1,411,562	Thrilling Fiction Group	1,375,371
Hillman Women's Group	1,340,875	Time Magazine	1,585,237
Household	2,086,029	Today's Woman	1,104,737
Ideal Women's Group	1,412,431	True	1,520,039
Ladies' Home Journal	4,564,101	True Confessions	1,440,401
Lev Gleason Comic Group	2,471,232	True Story	2,075,781
Life	5,364,567	True Story Women's Group	5,025,725
Look	3,200,145	Woman's Day	3,756,938
McCall's Magazine	3,807,101	Woman's Home Companion	4,059,383
Macfadden Women's Group	2,949,944	Young Romance Group	2,015,241

* Net paid circulation. † The publisher's figure is over 8,500,000; since the magazine does not take advertising, A.B.C. does not publish the circulation. NOTE: Does not include farm magazines.

Radio Stations and Networks

Source: National Association of Broadcasters.

Major networks	No. of stations (Aug. 1, 1950)	
	Owned and operated	Affiliated
ABC—American Broadcasting Company	5	282
CBS—Columbia Broadcasting System	7	181
MBS—Mutual Broadcasting System	0	533
NBC—National Broadcasting Company*	6	167

* Although NBC discontinued short-wave broadcasting Oct. 1, 1948, they still maintain 175 Latin American affiliated stations.

No. of stations* (Aug. 1, 1950)	Permits for construction		
	Operating		Total
Standard Broadcast	2,160	150	2,310
Television	106†	3	109
FM (Frequency Modulation)	687†	38	725

* Including territories and possessions. † Includes 52 licensed and 54 CP's operating on special temporary authority. ‡ Includes 1 CA and 190 CP's operating on special temporary authority. NOTE: Does not include farm magazines.

CANADA: There are 137 standard broadcast stations; 18 are owned and operated by the Canadian Broadcasting Corporation (CBC); 119 are privately owned and, in some cases, affiliated with CBC.

Patents

A patent, in the most general sense, is a document issued by a government, conferring some special right or privilege. The term is now restricted mainly to patents for inventions and, occasionally, land patents.

The grant of a patent for an invention gives the inventor the privilege, for a limited period of time, of excluding others from practicing a certain art or from making, using, or selling a certain article. However, it does not give him the right to make, use, or sell his own invention if it is an improvement on some unexpired patent whose claims are infringed thereby.

In the U. S., the law provides that a patent may be granted, for a term of 17 years, to any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, as well as any new and useful improvements thereof. A patent may also be granted to any person who has invented or discovered and asexually reproduced any new and distinct variety of plant (other than a tuber-propagated one) or has invented any new, original, and ornamental design for an article of manufacture.

A patent is granted only upon a regularly filed application, complete in all

respects; upon payment of the fees; and upon determination that the disclosure is complete and that the invention is new and useful. The disclosure must be of such nature as to enable others to reproduce the invention.

A complete application, which must be addressed to the Commissioner of Patents, Washington, D. C., consists of a petition, specification and claims, oath, drawing (whenever the nature of the case admits of it), and a filing fee of \$30 for cases having 20 claims or less. An additional fee of \$1 per claim is required for cases having more than 20 claims. The filing fee is not returned to the applicant if the patent is refused. If the patent is allowed, another fee of \$30 (and \$1 each for claims allowed in excess of 20) is required before the patent is issued. The fees for design patents vary.

Applications are considered strictly in the order in which they are received. Patents are not granted for printed matter, for methods of doing business, or for devices for which claims contrary to natural laws are made. Applications for a perpetual-motion machine have been made from time to time, but until a working model is presented that actually fulfills the conditions of the claim, no patent will be issued.

Trade-Marks

A trade-mark may be defined as a word, letter, device, or symbol, as well as some combination of these, which is used in connection with merchandise and which points distinctly to the origin or ownership of the article to which it is applied.

Certificates of registration of trade-marks are issued under the seal of the Patent Office and may be registered by the owner if he is engaged in interstate or foreign commerce, since any federal jurisdiction over trade-marks arises under the commerce clause of the Constitution. Trade-marks may be registered by foreign owners who comply with our law, as well as by citizens of foreign countries with which the U. S. has treaties relating to trade-marks. American citizens may register trade-marks in foreign countries by

complying with the laws of those countries. The right to registration and protection of trade-marks in many foreign countries is guaranteed by treaties.

General jurisdiction in trade-mark cases is given to the federal courts. Decisions of examiners on applications or oppositions are subject to appeal to the Commissioner of Patents, and from him to the U. S. Court of Customs and Patent Appeals. Before adopting a trade-mark, a person should make a search of prior marks in order to avoid infringing unwittingly upon them.

The duration of a trade-mark registration is 20 years, but it may be renewed indefinitely for 20-year periods, provided the trade-mark is still in use at the time of expiration.

Radio Sets Extant, Jan. 1, 1950

Source: Tele-Tech (Caldwell-Clements, Inc.)

United States:		Asia	10,500,000
Homes with radios	42,000,000	Australia	2,500,000
Secondary sets in homes	21,000,000	Europe	61,500,000
Sets in business, etc.	4,000,000	North American (except	
Automobile radios	14,000,000	U. S.)	5,500,000
Total sets in U. S.	81,000,000	South America	5,000,000
Other areas:		Total sets in other areas	86,500,000
Africa	1,500,000	Total sets in world	167,500,000

Copyrights

(Covering amendments of the law through June 3, 1949)

A copyright, international or national, is the right obtained by authors, musicians, and artists of all mediums to prevent the reproduction of their works without their consent. The U. S. Constitution (Article I, Section 8) empowers Congress "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The possession of a copyright prevents reproduction by writing, printing, copying, or imitation of the copyrighted article. Copyright also includes the right to control public performance of dramatic and musical works, to control mechanical reproductions of musical compositions, and to translate and dramatize literary works. Copyright protection extends to such works as books and pamphlets; periodicals and contributions to periodicals; lectures, sermons, and monologues; dramas and dramatical musical compositions; musical compositions; maps; works of art or models and designs for works of art; reproductions of a work of art; drawings or plastic works of scientific or technical character; photographs, prints, and pictorial illustrations; commercial prints and labels; and motion pictures.

The copyright term endures 28 years from the date of receipt in the Copyright Office for unpublished material and from the date of publication for published works. The copyright may be renewed for an additional period of 28 years, provided application for such renewal is made within one year prior to the date of expiration of the original term. The copyright of a book or similar publication is secured by publication of such work after printing on the title page, or the page immediately following, the required copyright notice. This notice consists of the word *Copyright* or the abbreviation *Copr.*, the year of publication, and the name of the copyright owner. It is important to bear in mind that copyright comes into being at the time of first publication if

this required notice appears on the work. If publication occurs without this notice, the work falls into the public domain, and the Copyright Office cannot register the claim. In short, the Copyright Office does not grant copyrights; the obtaining of such protection depends on whether or not the claimant follows the statutory formalities at the time of publication.

The law requires that, promptly after the work has been published, two copies thereof must be forwarded to the Register of Copyrights, Library of Congress, Washington 25, D. C. These copies should be accompanied by the proper application form and the statutory fee of \$4. If the work is a commercial print or label used in connection with the sale or advertisement of an article of merchandise, the fee is \$6.

Effective June 3, 1949, the term of ad interim protection for books and periodicals in the English language first published abroad was extended from six months to five years. Such works of foreign origin may be imported into the U. S. up to a total of 1,500 copies after ad interim registration has been obtained. The above amendment to the law also affords to the foreign author or publishers an option of obtaining registration without payment of the usual statutory fee if an extra copy of the work, accompanied by a catalogue card, is submitted to the Copyright Office within six months of the date of first publication abroad.

Presidential proclamations and treaties cover copyright relations of the U. S. with most of the important countries in the world.

Copies of application forms may be obtained from the Copyright Office free upon request. The Office also publishes, in Bulletin 14, the full U. S. copyright law. This bulletin can be purchased for fifteen cents upon application to the Register of Copyrights.

Birthstones

Source: Jewelry Industry Council.

January	Garnet
February	Amethyst
March	Aquamarine or Bloodstone
April	Diamond
May	Emerald
June	Pearl or Moonstone
July	Ruby
August	Peridot or Sardonyx
September	Sapphire
October	Opal or Tourmaline
November	Topaz
December	Turquoise or Lapis Lazuli

Annual Salaries of Federal Officials

President of the U. S.	\$100,000
Vice President of the U. S.	30,000
Cabinet members	22,500
Undersecretaries of executive departments	17,000
Deputy Secretary of Defense	20,000
Secretary of the Army	18,000
Secretary of the Navy	18,000
Secretary of the Air Force	18,000
Senators	12,500
Representatives	12,500
Speaker of the House	30,000
Chief Justice of the Supreme Court	25,500
Associate Justices of the Supreme Court	25,000

Gestation, Incubation and Longevity of Certain Animals

Source: T. Donald Carter, American Museum of Natural History.

Note: Listings for the periods of gestation or incubation are given for the full possible periods in days, with figures in parentheses indicating average. Figures for longevity are approximations with figures in parentheses indicating records established by certain individual animals.

Animal	Gestation and incubation, in days (average)	Longevity, in years (record exceptions)	Animal	Gestation and incubation, in days (average)	Longevity, in years (record exceptions)
Ass.....	365-385	18-20 (46)	Horse.....	304-360 (335)	20-25 (50+)
Bear.....	180-240*	15-20 (34)	Kangaroo.....	c. 39	10-12 (16)
Beaver.....	94-128	10-15 (20)	Lion.....	105-111	10 (29)
Cat.....	52-63	10-12 (21)	Mare.....	307-419 (336)	20 (45+)
Chicken.....	21	7-8 (14)	Monkey.....	149-179* (164)	12-15* (29)
Cow.....	c. 280	9-12 (25)	Opossum, American.....	8-12	5 (9)
Deer.....	140-246*	10-15 (26)	Pigeon.....	18	10-12 (39)
Dog.....	55-70 (63)	10-12 (24)	Rabbit.....	27-36 (31)	6-8 (15)
Dromedary.....	315-400 (330)	20-25 (40)	Rat.....	21-30 (22)	3 (5)
Duck.....	21-35* (28)	10 (15)	Seal.....	245-350* (250)	10-25*
Elephant.....	540-660* (628)	30-40 (98)	Sow.....	101-130 (115)	10 (22)
Ewe.....	146-161 (151)	12 (16)	Squirrel.....	28-35	8-9 (15)
Giraffe.....	c. 450	14-16 (28)	Turkey.....	28	6-8 (12)
Goat.....	135-163 (150)	12 (17)	Vixen (fox).....	51-60	8-10 (14)
Goose.....	28-30	25 (35)	Whale.....	276-365*	10-12 (16)
Guinea pig.....	63-71	3 (6)	Wolf.....	63	10-12 (16)
Hippopotamus.....	220-240	30 (46+)	Woman.....	270+ or —	67†

* Depending on kind.
100 have been recorded.

† Latest life expectancy charts list this age. Many instances of men or women living beyond

THE MAGNA CARTA

The Magna Carta was issued by King John (ruled 1199-1216) of the House of Plantagenet, England, on June 15, 1215 under compulsion from his barons. It was a compromise document which was a combination of the "Articles of the Barons," drawn up by these barons to secure protection, just taxation and administrative reforms and the suggestions added by John. John's military reverses and the exhortations of the Church compelled him to accede to the demands of the barons.

The charter was the first detailed statement of feudal law, the first clear agreement between the King and his barons as to the exact demands which the King can make on them and which they can make on their men.

The text of the original charter was continuous, but later copies have been divided into 63 chapters, condensed as follows:

1. Enjoined that the Church of England shall be free and have all her holy rights and liberties.

2 to 6. Regulated the scale of fees payable to the King by heirs on succession and limited the King's privilege as the guardian of minors.

7 and 8. Afforded similar protection to widows.

9. Protected a royal debtor from aggression.

10 and 11. Protected borrowers from usury.

12. Regulated the amount of aid due the King and declared other taxes to require the consent of the general council.

13. Granted to citizens of London, all ancient liberties and customs.

14. Provided for a meeting of the council when necessary to raise funds, etc.

15 and 16. Dealt with feudal tenure.

17 to 22. Reformed abuses in administration of justice, notably by fixing the place where pleas could be heard.

23 to 34. Dealt with other abuses connected with feudal services.

35. Established uniform weights and measures in England.

36 to 38. Restrained the King from exercising wardship of minors over whom others had the right.

39. Established the freedom of the subject.

40. Declared the refusal to delay justice.

41 to 45. Dealt with tolls, forest laws, hostages, etc.

46 and 47. Formulated the law of Welshmen.

48. Promised the return of hostages to Llewellyn, Prince of Wales.

49. Promised the return of hostages to Alexander I, King of Scotland.

50 to 63. Established a committee of 25 barons to secure the performance of these the above named King's promises.

Record Passages of Atlantic (Screw) Steamships

Source: U. S. Maritime Commission, Aug. 22, 1946.

WESTWARD PASSAGES

EASTWARD PASSAGES

Date	Ship and (flag*)	To New York from	Time D. H. M.	Speed knots	Sea miles	Date	Ship and (flag*)	From New York to	Time D. H. M.	Speed knots	Sea miles
1867	CITY OF PARIS (B) (Time record only)	Queenstown	8 4 1	.....	.....	1852	GREAT BRITAIN (B)	Liverpool	11 0 0	.....	.....
1872	ADRIATIC (B)	"	7 23 17	14.52	.....	1869	CITY OF BRUSSELS† (B)	Queenstown	7 22 3	14.65	.....
1875	CITY OF BERLIN† (B)	"	7 18 2	15.2	.....	1873	BALTIC† (B)	"	7 20 9	15.11	.....
1875	GERMANIC (B)	"	7 11 37	15.75	.....	1875	CITY OF BERLIN† (B)	"	7 15 28	15.37	.....
1877	BRITANNIC (B)	"	7 10 53	15.46	.....	1876	GERMANIC† (B)	"	7 15 17	15.78	.....
1877	ALASKA† (B)	"	6 21 40	16.04	.....	1876	BRITANNIC† (B)	"	7 12 41	15.95	.....
1882	OREGON† (Guion) (B)	"	6 10 9	18.16	.....	1879	ARIZONA† (B)	"	7 8 0	15.95	.....
1884	OREGON (Cunard) (B)	"	6 9 42	18.16	.....	1882	ALASKA† (B)	"	6 18 37	16.88	.....
1887	UMBRIA (B)	"	6 4 34	18.91	.....	1884	OREGON (Guion) (B)	"	6 16 57	17.8	.....
1885	ETRURIA† (B)	"	6 1 44	19.57	.....	1884	OREGON† (Cunard) (B)	"	6 10 40	18.18	.....
1888	CITY OF PARIS† (B)	"	5 14 24	20.01	.....	1885	ETRURIA† (B)	"	6 4 54	19.41	.....
1889	TEUTONIC† (B)	"	5 16 31	20.35	.....	1888	UMBRIA (B)	"	6 3 12	.....	.....
1890	MAJESTIC† (B)	"	5 18 8	20.11	.....	1889	CITY OF PARIS† (B)	"	5 22 50	19.49	.....
1891	CAMPANIA (B)	"	5 9 6	20.41	.....	1891	TEUTONIC (B)	"	5 21 3	19.78	.....
1893	LUCANIA† (B)	"	5 7 23	21.82	.....	1892	CITY OF NEW YORK (B)	"	5 19 57	20.1	.....
1898	KAISER WILHELM DER GROSSE† (G)	Southampton	5 15 20	22.29	.....	1894	LUCANIA† (B)	"	5 8 38	.....	.....
1900	DEUTSCHLAND (G)	"	5 11 54	23.15	3,044	1897	KAISER WILHELM DER GROSSE† (G)	Southampton	5 15 25	22.01	.....
1901	LUSITANIA† (B)	Queenstown	4 11 40	24.00	.....	1898	KAISER WILHELM DER GROSSE† (G)	Eddystone Lt.	5 7 38	23.51	3,082
1901	MAURETANIA† (B)	"	4 10 41	26.06	.....	1900	DEUTSCHLAND† (G)	Plymouth	5 8 16	23.58	.....
1903	BREMENT† (G)	Cherbourg	4 21 44	26.9	3,162	1901	KAISER WILHELM II† (G)	Queenstown	4 15 50	25.57	.....
1929	EUROPA† (G)	"	4 17 42	27.83	.....	1904	LUSITANIA† (B)	"	4 13 41	25.89	.....
1930	REX† (I)	Gibraltar	4 17 6	27.91	3,157	1910	MAURETANIA† (B)	Cherbourg	5 1 49	26.25	3,198
1933	NORMANDIE† (F)	Bishop's Rock	4 13 58	28.92	3,181	1911	"	Cherbourg	4 17 50	27.22	3,098
1935	QUEEN MARY† (B)	"	4 3 27	30.14	2,539	1911	BREMENT† (G)	Plymouth	4 14 30	27.91	3,084
1936	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1911	NORMANDIE† (F)	Cherbourg	4 17 43	28.14	3,199
1938	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1935	QUEEN MARY† (B)	Bishop's Rock	4 16 15	28.51	3,199
1938	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1937	QUEEN MARY† (B)	"	4 3 25	30.35	.....
1938	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1938	QUEEN MARY† (B)	"	4 3 25	30.35	2,978
1938	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1938	QUEEN MARY† (B)	"	3 23 57	30.63	2,938

* (B)—British; (G)—German; (I)—Italian; (F)—French. †Vessels which have held the Blue Riband.

The National Park System of the United States

Source: National Park Service.

The National Park System of the United States, administered by the National Park Service, a bureau of the Department of the Interior, embraces a total of 176 areas, containing approximately 21,855,457 acres in federal ownership. Started with the establishment of Yellowstone National Park in 1872, the system includes not only the most extraordinary and spectacular scenic exhibits in the United States proper and in Alaska and Hawaii but also a large number of sites distinguished for their historic or pre-historic importance or scientific interest. The number and extent of the various types of areas which comprise the system, as of June 30, 1950, are as follows:

Type of area	Number	Federal land (acres)	Lands within exterior boundaries not federally owned (acres)	Total lands within exterior boundaries (acres)
National Parks.....	28	12,221,988.14	268,220.29	12,490,208.43
National Historical Parks.....	5	10,392.67	5,855.45	16,248.12
National Monuments.....	85	9,438,805.40	327,765.73	9,766,571.13
National Military Parks.....	11	24,283.05	2,561.58	26,844.63
National Memorial Park.....	1	58,341.26	12,028.40	70,369.66
National Battlefield Parks.....	2	3,778.65	800.00	4,578.65
National Battlefield Sites.....	6	188.33	547.65	735.98
National Memorials.....	10	1,564.94	58.13	1,623.07
National Historic Sites.....	12	2,940.91	2,502.26	5,443.17
National Cemeteries.....	10	217.01	5.00	222.01
National Parkways.....	4	63,903.24	40,400.79	104,304.03
National Capital Parks.....	1	29,053.22	1,500.00	30,553.22
Total.....	176	21,855,456.82	662,245.28	22,517,702.10

National Parks

Name, location and year established as National Park	Area in U. S. ownership, acres	Outstanding characteristics
Acadia (Maine), 1919.....	28,545.62	Rugged seashore on Mt. Desert Island and adjacent mainland
Big Bend (Texas), 1944.....	692,304.70	Mountains and desert bordering the Rio Grande
Bryce Canyon (Utah), 1928.....	36,010.38	Area of grotesque eroded rocks brilliantly colored
Carlsbad Caverns (N. Mex.), 1930.....	45,526.59	One of the world's largest known caves; spectacular flight of bats daily, in summer
Crater Lake (Oregon), 1902.....	160,290.33	Deep blue lake in crater of inactive volcano
Everglades (Florida), 1947.....	1,100,173.00	Sub-tropical area with abundant bird and animal life
Glacier (Montana), 1910.....	998,415.93	Rocky mountains with many glaciers and lakes
Grand Canyon (Arizona), 1919.....	645,295.91	Mile deep gorge, 4 to 18 miles wide, 217 miles long, of which 105 miles are within the park; fantastically sculptured by erosion
Grand Teton (Wyoming), 1929.....	95,360.46	Picturesque range of high mountain peaks
Great Smoky Mts. (N. C.-Tenn.), 1930.....	505,173.79	Highest mountain range east of Black Hills; luxuriant plant life
Hawaii (Territory Hawaii), 1916.....	176,456.60	Spectacular volcanic area with two active volcanoes
Hot Springs (Arkansas), 1921.....	1,019.13	47 mineral hot springs said to have therapeutic value
Isle Royale (Michigan), 1940.....	133,838.51	Largest wilderness island in Lake Superior; great moose herd
Kings Canyon (California), 1940.....	453,064.82	Huge canyons; high mountains; giant sequoias
Lassen Volcanic (California), 1916.....	103,429.28	Only recently active volcano in United States proper
Mammoth Cave (Kentucky), 1936.....	50,695.73	Vast limestone labyrinth with underground river
Mesa Verde (Colorado), 1906.....	51,017.87	Best preserved pre-historic cliff dwellings in United States
Mount McKinley (Alaska), 1917.....	1,939,319.04	Highest mountain in North America; spectacular wildlife
Mount Rainier (Washington), 1899.....	241,571.09	Greatest single-peak glacial system in United States
Olympic (Washington), 1938.....	840,838.69	Finest mountain wilderness of Pacific Northwest
Platt (Oklahoma), 1906.....	911.97	Cold mineral springs with distinctive properties
Rocky Mountain (Colorado), 1915.....	253,131.45	Section of the Rocky Mountains; 65 peaks over 10,000 feet
Sequoia (California), 1890.....	385,099.79	Groves of giant sequoias; world's largest and probably oldest living things; includes Mt. Whitney, highest mountain in U. S. proper
Shenandoah (Virginia), 1935.....	193,472.98	Tree covered mountains; scenic Skyline Drive
Wind Cave (South Dakota), 1903.....	26,576.25	Limestone caverns in Black Hills; buffalo herd
Yellowstone (Wyoming-Montana-Idaho), 1872.....	2,213,206.55	World's greatest geyser area; spectacular falls and canyon; one of world's great wildlife sanctuaries
Yosemite (California), 1890.....	757,000.62	Mountains; inspiring gorges and waterfalls; giant sequoias
Zion (Utah), 1919.....	94,241.06	Multicolored gorge in heart of southern Utah desert

National Historical Parks

Name and location	Acreage in U. S. ownership
Abraham Lincoln (Kentucky)	116.50
Chalmette (Louisiana)	69.61
Colonial (Virginia)	7,134.60
Morristown (New Jersey)	958.37
Saratoga (New York)	2,113.59

National Monuments

Ackia Battleground (Mississippi)	49.15
Andrew Johnson (Tennessee)	17.08
Appomattox Court House (Va.)	968.25
Arches (Utah)	33,929.94
Aztec Ruins (New Mexico)	27.14
Badlands (South Dakota)	123,052.46
Bandelier (New Mexico)	27,048.89
Big Hole Battlefield (Montana)	200.00
Black Canyon of the Gunnison (Colorado)	13,176.02
Cabrillo (California)	.50
Canyon de Chelly (Arizona)	83,840.00
Capitol Reef (Utah)	33,068.74
Capulin Mountain (New Mexico)	680.42
Casa Grande (Arizona)	472.50
Castillo de San Marcos (Florida)	18.51
Castle Pinckney (South Carolina)	3.50
Cedar Breaks (Utah)	6,172.20
Chaco Canyon (New Mexico)	21,239.95
Channel Islands (California)	26,819.26
Chiricahua (Arizona)	10,529.80
Colorado (Colorado)	18,120.55
Craters of the Moon (Idaho)	47,210.67
Custer Battlefield (Montana)	765.34
Death Valley (Calif.-Nev.)	1,860,138.31
Devil Postpile (California)	798.46
Devils Tower (Wyoming)	1,193.91
Dinosaur (Utah-Colorado)	190,798.49
Effigy Mounds (Iowa)	1,000.00
El Morro (New Mexico)	240.00
Fort Frederica (Georgia)	74.53
Fort Jefferson (Florida)	47,125.00
Fort Laramie (Wyoming)	214.41
Fort Matanzas (Florida)	227.76
Fort McHenry (Maryland)	47.64
Fort Pulaski (Georgia)	5,427.39
Fort Sumter (South Carolina)	2.40
Fossil Cycad (South Dakota)	320.00
George Washington Birthplace (Virginia)	393.68
Gila Cliff Dwellings (N. Mex.)	160.00
Glacier Bay (Alaska)	2,297,734.10
Gran Quivira (New Mexico)	450.94
Grand Canyon (Arizona)	196,051.00
Great Sand Dunes (Colorado)	35,908.19
Holy Cross (Colorado)	1,392.00
Homestead (Nebraska)	162.73
Hovenweep (Utah-Colorado)	299.34
Jackson Hole (Wyoming)	206,052.66
Jewel Cave (South Dakota)	1,274.56
Joshua Tree (California)	695,221.64
Katmai (Alaska)	2,697,590.00
Lava Beds (California)	46,027.56
Lehman Caves (Nevada)	640.00

National Monuments,—(cont.)

Name and location	Acreage in U. S. ownership
Meriwether Lewis (Tennessee)	300.00
Montezuma Castle (Arizona)	783.09
Mound City Group (Ohio)	57.00
Muir Woods (California)	424.56
Natural Bridges (Utah)	2,649.70
Navajo (Arizona)	360.00
Ocmulgee (Georgia)	683.48
Old Kasaan (Alaska)	38.00
Oregon Caves (Oregon)	480.00
Organ Pipe Cactus (Arizona)	328,161.73
Perry's Victory (Ohio)	14.25
Petrified Forest (Arizona)	85,303.63
Pinnacles (California)	12,817.77
Pipe Spring (Arizona)	40.00
Pipestone (Minnesota)	115.60
Rainbow Bridge (Utah)	160.00
Saguaro (Arizona)	53,669.24
Scotts Bluff (Nebraska)	2,196.44
Shoshone Cavern (Wyoming)	212.37
Sitka (Alaska)	57.00
Statue of Liberty (New York)	10.38
Sunset Crater (Arizona)	3,040.00
Timpanogos Cave (Utah)	250.00
Tonto (Arizona)	1,120.00
Tumacacori (Arizona)	10.00
Tuzigoot (Arizona)	42.67
Verendrye (North Dakota)	253.04
Walnut Canyon (Arizona)	1,641.62
Wheeler (Colorado)	300.00
White Sands (New Mexico)	140,247.04
Whitman (Washington)	45.84
Wupatki (Arizona)	35,013.03
Yucca House (Colorado)	9.60
Zion (Utah)	33,920.75

National Military Parks

Chickamauga and Chattanooga (Georgia-Tennessee)	8,127.16
Fort Donelson (Tennessee)	102.54
Fredericksburg and Spotsylvania (Virginia)	2,420.71
Gettysburg (Pennsylvania)	2,534.11
Gulford Courthouse (N. C.)	148.83
Kings Mountain (South Carolina)	4,012.00
Moore's Creek (North Carolina)	30.00
Petersburg (Virginia)	1,531.02
Shiloh (Tennessee)	3,729.73
Stones River (Tennessee)	323.86
Vicksburg (Mississippi)	1,323.56

National Memorial Park

Theodore Roosevelt (N. Dak.)	58,341.26
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National Battlefield Parks

Kennesaw Mountain (Georgia)	3,094.21
Richmond (Virginia)	684.44

National Battlefield Sites

Antietam (Maryland)	183.33
Brices Cross Roads (Mississippi)	1.00
Cowpens (South Carolina)	1.00
Fort Necessity (Pennsylvania)	2.00

National Battlefield Sites—(cont.)

Name and location	Acreage in U. S. ownership
Tupelo (Mississippi)	1.00
White Plains (New York) ....	.00

National Historic Sites

Adams Mansion (Massachusetts)	4.05
Atlanta Campaign Markers (Ga.)	20.96
Federal Hall Memorial (New York) .....	.49
Fort Raleigh (North Carolina)	16.45
Hampton (Maryland)	43.30
Home of Franklin D. Roosevelt (New York)	33.23
Hopewell Village (Pennsylvania)	848.06
Jefferson National Expansion Memorial (Missouri)	82.58
Manassas Battlefield Park (Va.)	1,670.74
Old Philadelphia Custom House (Pennsylvania) .....	.79
Salem Maritime (Massachusetts)	8.61
San Juan* (Puerto Rico)	40.00
Vanderbilt Mansion (New York)	211.65

National Memorials

DeSoto (Florida)	24.18
House Where Lincoln Died (D. C.) .....	.05
Kill Devil Hill (N. C.)	314.40

* Approximate acreage. Area not included in Park System totals since it is administered by agreement with the Department of the Army, which has basic jurisdiction.

National Memorials—(cont.)

Name and location	Acreage in U. S. ownership
Lee Mansion (Virginia)	2.71
Lincoln Memorial (D. C.) ....	.61
Lincoln Museum (D. C.) .....	.18
Mount Rushmore (S. Dak.) ..	1,220.32
New Echota Marker (Georgia) ..	.92
Thomas Jefferson (D. C.)	1.20
Washington Monument (D. C.) ..	.37

National Cemeteries

Antietam (Maryland)	11.36
Battleground (District of Columbia)	1.03
Fort Donelson (Tennessee) ...	15.34
Fredericksburg (Virginia)	12.00
Gettysburg (Pennsylvania) ...	15.55
Poplar Grove (Virginia)	8.72
Shiloh (Tennessee)	10.25
Stones River (Tennessee)	20.09
Vicksburg (Mississippi)	119.76
Yorktown (Virginia)	2.91

National Parkways

Blue Ridge (N. C.-Va.)	45,690.78
George Washington Memorial (Va.-Md.)	2,917.33
Natchez Trace (Tenn.-Ala.-Miss.)	14,632.26
Suitland (Md.-D. C.)	662.87

National Capital Parks

National Capital Parks (D. C.-Va.-Md.)	29,053.22
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The National Geographic Society

The National Geographic Society, with headquarters in Washington, D. C., was founded in 1888 "for the increase and diffusion of geographic knowledge."

In furthering its objectives, the Society has published a monthly magazine of popular and pictorial geography, has prepared and issued more than a hundred large supplement maps covering major world areas, and has sponsored—either alone or in co-operation with government, military, educational and scientific organizations—scores of globe-ranging research expeditions.

The Society also maintains a free information service for the use of hundreds of newspapers, press associations, radio and television commentators as well as some 35,000 public school teachers.

Expeditions sponsored or co-sponsored by the Society have reached from Arctic to Antarctic regions, from ocean depths to the stratosphere. Its flag was with Peary at the North Pole in 1909 and later with

Byrd at both the North and South Poles. The Society backed the 1934 bathysphere descents of William Beebe into the depths of the ocean off Bermuda, and the following year, it supported the highest-yet stratosphere flight over South Dakota by U. S. Army Air Corps pilots.

Current projects, begun this year or carried over from last year, include an archaeological expedition to Panamá, as well as scientific studies of the aurora borealis, cosmic rays, and the infinite areas of the stars.

Backed jointly by the National Geographic Society and the California Institute of Technology, a project to provide the world with the first definitive sky atlas went under way in 1949 at the famous Palomar Observatory in California. Completion of this survey is expected in four years. It should provide a collection of some 2,000 reproductions of photographic plates recording 500 million stars and perhaps 10 million complete stellar systems outside our own.

Museums of the United States

Source: Questionnaires to Museums.

NEW YORK CITY

American Academy of Arts and Letters: 633 W. 155th St., New York 32. Open: wkdys. & Sun. 2-5 (closed Mon.) Free.

Painting, sculpture by members of Academy and National Institute of Arts and Letters. Fall Exhibition by candidates for Art Grant. Spring Exhibition by new members and recipients of Grants.

American Museum of Natural History: Central Park W. at 79th St., New York 24. Open: wkdys. 10-5, Sun. & hldys. 1-5. Free.

Covers all branches of natural sciences except systematic botany with thorough exhibits in each field. Large habitat groups of animals. Library.

Brooklyn Museum: Eastern Pkwy., Brooklyn 17, N. Y. Open: wkdys. 10-5, Sun. & hldys. 1-5 (closed Xmas). Free.

European and American paintings. Egyptian collection. Art of China, Japan, India, Near East. Exhibits showing Primitive and New World cultures. American rooms. Industrial design laboratory. Art school. Library and concerts.

Cloisters: Ft. Tryon Pk., New York 33. Open: wkdys. 10-5 (closed Mon.), Sun., hldys. 1-5 (May-Sept. 1-6). Free (Fri. 25c. plus Fed. tax).

Cloisters, chapel, chapter house reconstructed from parts of old European structures. Frescoes, polychromed statues, stained glass, Gothic tapestries. Branch of Metropolitan Museum of Art.

Frick Collection: 1 E. 70th St., New York 21. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5. Free.

Paintings, watercolors, prints, drawings of 14th to 19th centuries. Italian Renaissance and French sculpture. Chinese and French porcelain. Concerts.

Hispanic Society of America: Broadway bet. 155th and 156th Sts., New York 32. Open: wkdys. 10-4:30 (closed Mon.); Sun. 1-5. Library open: wkdys. 1-4:30 (closed Sun., Mon., hldys., mo. of Aug.). Free.

Devoted to Spanish and Portuguese art, literature. Paintings, sculpture, ceramics, metalwork, furniture, textiles, manuscripts.

Metropolitan Museum of Art: 5th Ave. at 82nd St., New York 28. Open: wkdys. 10-5, Sun., hldys. 1-5. Free.

Extensive collection of European and American paintings, decorative arts, prints. Egyptian, Asiatic, Classical art. Musical instruments, arms and armor. American period rooms. Costumes and textiles. Library. *See also* Cloisters.

Museum of Modern Art: 11 W. 53rd St., New York 19. Open: wkdys. 12-7, Sun. & hldys. 1-7. Adm. 44c.

Founded to encourage study of modern art and its application to manufacturing

and practical life. Constantly changing exhibitions of contemporary painting, sculpture, photography, architecture, industrial design, films.

Museum of Non-Objective Painting: 1071 5th Ave., New York 28. Open: wkdys. 10-6 (closed Mon.), Sun. 12-6. Free.

Works by the masters of non-objective painting. Group loan shows. Bach and Beethoven music.

Museum of the American Indian, Heye Foundation: Broadway at 155th St., New York 32. Open: Tues.-Sat. 2-5 (closed Sun., Mon., hldys.). Free.

Archaeology and ethnology of Americas from Arctic Circle to Tierra del Fuego.

Museum of the City of New York: 5th Ave. at 104th St., New York 29. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5, closed Xmas. Free.

History of New York City. Period costumes, furniture, miniature scenes, portraits, paintings, prints, manuscripts, silver, toys, dolls. Fire engines, horse car, "Tally-ho". Theater, music exhibits.

National Academy of Design: 1083 5th Ave. (at 90th St.) New York 28. Open: wkdys. & Sun. 1-5 (during exhibitions). Adm. 25c. Permanent collection not available at present for exhibition. Special annual exhibitions of selected organizations.

New York Historical Society: Central Park W. at 77th St., New York 24. Open: wkdys. & Sun. 1-5, (Sat. 10-5, closed Mon., NY Day, July 4, Thns. Day, Xmas, month of Aug.). Free.

New York city and state historical exhibits. Early American paintings and portraits. American folk arts and crafts. Audubon watercolors of birds. John Rogers statuette groups. Library.

Roosevelt (Theodore) Museum: 28 E. 20th St., New York 3. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5 (closed Thns. Day, Xmas, NY Day). Free.

Restored birthplace of Roosevelt. Mounted lion shot by him in Africa. Photographs, letters, trophies, personal items. Extensive cartoon collection.

Whitney Museum of American Art: 10 W. 8th St., New York 11. Open: wkdys. & Sun. 1-5 (closed Mon. & June 1-Sept. 15). Free. Sculpture, paintings, watercolors, drawings, prints by American artists. Annual exhibitions of American contemporaries.

CHICAGO

Art Institute of Chicago: Michigan Ave. at Adams St., Chicago 3, Ill. Open: wkdys. 9-5, Sun. 12-5. Adm. 30c. (free Wed., Sat., Sun., hldys.).

Paintings, sculpture, prints, drawings. Oriental arts; European, American deco-

rative arts. Thorne Miniature Rooms. Library, art school.

Chicago Academy of Sciences, Museum of Natural History: 2001 N. Clark St., Chicago 14, Ill. Open: wkdys. 1-4 (Sat. 10-5, closed Mon.), Sun. & hldys. 10-5. Free.

Emphasis on regional natural history. Habitat groups of existing and prehistoric animals. Study collections of North American flora and fauna.

Chicago Historical Society: N. Clark St. at North Ave., Chicago, Ill. Open: wkdys. 9:30-4:30, Sun. 12:30-5:30. Free (Sun., Mem. Day, July 4, Lab. Day 25c.).

Exhibits and period rooms from discovery and exploration of America to present. Special emphasis on history of Chicago. Washington, Lincoln exhibits.

Chicago Natural History Museum (formerly Field Museum): Roosevelt Rd. at Lake Shore Dr., Chicago 5, Ill. Open: wkdys. & Sun.—Nov.—Feb. 9-4; May-Aug. 9-6; Mar., Apr., Sept., Oct. 9-5 (closed Xmas and NY Day). Adm. 30c. (free Thurs., Sat., Sun.).

Exhibits in anthropology, botany, geology, zoology. Prehistoric skeletons. Dioramas of Stone-Age Europe. Vast Egyptian collection. Model of moon.

Museum of Science and Industry: 57th St. at Lake Michigan, Chicago 37, Ill. Open: fall & winter—wkdys. 9:30-4 (Sat. 9:30-5:30), Sun. & hldys. 9:30-7; spring & summer—wkdys. 9:30-5:30, Sun. & hldys. 9:30-7. Free (small fee to several exhibits).

Over 8 acres of exhibits. Working coal mine. Full-size street of 1910. Fully equipped farm. Evolution of automobile and airplane. Working iron foundry. Exhibits in physics, medicine, chemistry. Colleen Moore's Doll House.

Oriental Institute of the University of Chicago: 1155 E. 58th St., Chicago 37, Ill. Open: June 1-Nov. 30—wkdys. 10-5, Sun. 11-5; Dec. 1-May 31—wkdys. 1-5 (Sat. 10-5), Sun. 11-5. Free.

Representative collections of Near Eastern objects, including 40-ton human-headed winged bull from Khorsabad; 16-ft. statue of Tutankhamon from Egypt; gold ornaments from ancient Persia.

Vanderpoel (John H.) Memorial Art Gallery: Longwood Dr. at 96th St., Chicago 43, Ill. Open: wkdys. & Sun. 9-5 (closed hldys.). Free.

Paintings, watercolors, etchings, sculpture. Attempts to serve the person uninterested in art as well as the connoisseur.

WASHINGTON, D. C.

Corcoran Gallery of Art: 17th St. at New York Ave., N. W., Washington 6, D. C. Open: wkdys. 10-4:30 (Mon. 12-4:30, Sat. 9-4:30), Sun. & hldys. 2-5 (closed Xmas & July 4). Free.

Specializes in American art, but has notable collection of 17th century Dutch and 19th century French paintings. Per-

sian rugs, Italian majolica, Greek and Roman antiquities. Bayre bronzes. Large collection of American sculpture.

Freer Gallery of Art: Independence Ave. at 12th St., Washington 25, D. C. Open: wkdys. & Sun. 9-4:30 (closed Xmas). Free. Oriental paintings, sculpture, bronzes, pottery, metalwork, manuscripts. Largest extant Whistler collection.

National Air Museum: The Mall, 10th and Jefferson Dr., Washington 25, D. C. Open: every day but Xmas 9-4:30. Free.

37 full-sized aircraft, including Wright brothers' *Kitty Hawk*, Lindbergh's *Spirit of St. Louis*, Wiley Post's *Winnie Mae*. Engines, propellers, structure specimens, instruments, etc.

National Collection of Fine Arts: Constitution Ave. at 10th St., Washington 25, D. C. Open: wkdys. & Sun. 9-4:30. Free.

Art collections given by Harriet Lane Johnston, Ralph Cross Johnson, William T. Evans, John Gellatly and others.

National Gallery of Art: Constitution Ave. at 6th St., Washington 25, D. C. Open: wkdys. 10-5, Sun. 2-10, closed Xmas & New Year's Day. Free.

Paintings, sculpture, drawings, prints, decorative arts given by Mellon, Kress, Widener, Rosenwald, Dale, the Booths and others. U. S. Government Index of American Design. Concerts.

Smithsonian Institution: on the Mall, Washington 25, D. C.

Maintains the following museums and art galleries: Freer Gallery of Art, National Air Museum, National Collection of Fine Arts, National Gallery of Art, U. S. National Museum. See those entries.

United States National Museum: several bldgs. on the Mall, Washington 25, D. C. Open: wkdys. & Sun. 9-4:30. Free.

Exhibits in anthropology, biology, geology, engineering, industry, history. Relics of Washington and Lincoln.

PHILADELPHIA

Academy of Natural Sciences of Philadelphia: 19th and the Parkway, Philadelphia 3, Pa. Open: wkdys. 9-5 (summer 9-4), Sun. 1-5. Free.

Large habitat groups of animals of North America, Africa, Asia. Hall of Earth History and Audubon Bird Hall. Minerals and gems. Library.

Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanic Arts: 20th St. at Benj. Franklin Pkwy., Philadelphia 3, Pa. Open: wkdys. 12-5 (Sat. 10-5, closed Mon.), Sun. 12-5. Adm. 60c.

Activities grouped into 7 major categories: Benj. Franklin Memorial; monthly Journal; lectures; library; medal awards; museum of science and industry, including planetarium; research laboratories.

Pennsylvania Academy of the Fine Arts: Broad and Cherry Sts., Philadelphia 2. Open: wkdys. 10-5 (closed Mon., July 4,

Thnks. Day, Xmas, NY Day), Sun. & hldys. 1-5. Free (except during two annual exhibitions).

Permanent collections include American art from 18th century to present. Special winter exhibit of painting, sculpture. Special fall exhibit of water colors, prints, miniatures.

Philadelphia Museum of Art: Parkway at 26th St., Philadelphia 30, Pa. Open: wkdys. & Sun. 9:30-5 (closed Xmas & NY Day). Free.

Art from beginning of Christian era. Paintings: old masters, contemporary French, American, Mexican. Prints, decorative arts, period rooms. Architectural units. Medieval and Oriental arts.

MUSEUMS IN OTHER CITIES

Alabama Museum of Natural History: University of Alabama, Tuscaloosa. Open: wkdys. & Sun. 8-5. Free.

All phases of natural history with emphasis on geology. *See also* Mound State Monument Archaeological Museum.

Albright Art Gallery. *See* Buffalo Fine Arts Academy.

Atkins Museum. *See* Nelson Gallery.

Atomic Energy, American Museum of: Oak Ridge, Tenn. Open: wkdys. 10:30-6, Sun. 12:30-6:30. Adm. 25c. (children 5c.).

Scale models, pictures, etc. illustrating processes and principles of atomic energy. First museum in world devoted exclusively to subject.

Baseball Hall of Fame and Museum, Natl.: Main St., Cooperstown, N. Y.

Relics, pictures, documents of baseball history. Bronze plaques of game's immortals. *See also* Hall of Fame in index.

Berkshire Museum: Pittsfield, Mass. Open: wkdys. 10-5 (closed Mon.), Sun. 2-5. Free. Art objects from Egyptian to modern times. Paintings and sculpture. Indian and Eskimo exhibits. Original "One Horse Shay."

(Boston) Museum of Fine Arts: 465-479 Huntington Ave., Boston 15, Mass. Open: wkdys. 9-5 (closed Mon.), Sun. 1:30-5:30. Free.

European and American paintings. Early American silver, furniture, interiors. Print collection largest in U. S. Noted Asiatic, Egyptian, Classical collections.

Buffalo Fine Arts Academy—Albright Art Gallery: 1285 Elmwood Ave., Buffalo 22, N. Y. Open: wkdys. 10-5 (Mon. 2-6, Wed. 2-10), Sun. 2-6. Free.

European and American paintings, including contemporary works. Sculpture court. Small sculptures and ceramics. Religious art. Library and concerts.

Buffalo Museum of Science: Humboldt Park, Buffalo, N. Y. Open: wkdys. 10-5 (Sat. 9-5), Sun. & hldys. 1:30-5:30. Free.

Extensive natural history collections. African and South Sea exhibits. Chinese

pottery. Babylonian seals. First and rare editions of scientific monographs.

California Academy of Sciences: Golden Gate Park, San Francisco 18. Open: wkdys. & Sun. 10-5. Free.

North American and African habitat groups. Exhibits of large game fish. Reptiles, plants, fossils, minerals. Aquarium.

California Palace of the Legion of Honor: Lincoln Park, San Francisco. Open: every day of year 10-5. Free.

European and American paintings. Rodin sculpture and drawings. Furniture, bronzes, porcelain, tapestries. Egyptian art. Organ recitals and movies.

Carnegie Institute: 4400 Forbes St., Pittsburgh 13, Pa. Open: wkdys. 10-6, Sun. 2-6. Free.

Department of Fine Arts: European and American paintings, ancient sculpture. Carnegie Museum: exhibits in history and natural history. Decorative and useful arts. Music Hall. Carnegie Library.

Cincinnati Art Museum: Eden Park, Cincinnati 6, Ohio. Open: wkdys. 10-5 (Tues. during Oct.-May 1-10), Sun. & hldys. 2-5. Free.

Paintings, prints since 15th century. Egyptian, Greco-Roman, Medieval, Oriental sculpture. Pottery, bronzes. Musical instruments, 18th-century decorative arts. Library, movies.

Cleveland Museum of Art: Wade Park, Cleveland 6, Ohio. Open: wkdys. 9-5 (Wed. 9 A.M.-10 P.M., Fri. 9-5, 7-10 Oct. thru May, closed Mon.), Sun. 1-6. Free.

Classical and modern art of all nations and ages; considerable art of Cleveland. Paintings, sculpture, graphic arts, furniture, textiles. Byzantine, Medieval, Early American collections.

Cleveland Museum of Natural History: 2717 Euclid Ave., Cleveland 15, Ohio. Open: wkdys. 9-5, Sun. 2-6. Free.

Mammals, birds, reptiles, fish, insects, plants, minerals. Most complete mastodon yet found. Hanna Star Dome, showing constellations month by month.

Colorado Springs Fine Arts Center: 30 W. Dale St., Colorado Springs, Colo. Open: wkdys. 10-5 (closed Mon. from Sept. thru May), Sun. 1:30-5. Free.

Contemporary paintings. Latin American and Southwestern folk arts and crafts. Navajo sand-painting reproductions. Concerts, theater arts.

Currier Gallery of Art: 192 Orange St., Manchester, N. H. Open: wkdys. 10-5, Sun. 2-5. Free.

Paintings, prints, drawings, sculpture, glass, tapestries. American furniture and decorative arts of 17th to 19th centuries. Concerts, lectures, movies.

Davenport Public Museum: Brady St. at 7th, Davenport, Iowa. Open: wkdys., Sun., hldys. 2-5 (Sat. 9-12, 1-4, closed Mon.). Free.

- Science, history, applied art exhibits, including anthropology, ethnology, Oriental and Mediterranean culture. Art and Historical Library at 215 Main St.
- Denver Art Museum:** 5 museums, under administration of Schleier Gallery, 1343 Acoma St., Denver, Colo. Open: wkdys. 9-5 (Mon. 2-5, 7-9), Sun. 2-5. Free.
- European, American paintings and decorative arts, Oriental, South Sea, African, Latin American, American Indian arts and crafts. Art school, children's museum.
- Denver Museum of Natural History:** City Park, Denver 6. Open: wkdys. 9-5, Sun. 12-5. Free.
- Natural history of North and South America. Habitat groups of mammals and birds. Minerals, dinosaur skeletons.
- Detroit Institute of Arts:** 5200 Woodward Ave., Detroit 2, Mich. Open: Sept.-June—wkdys. 1-10 (Sat. 9-6, closed Mon.), Sun. 9-6; July & Aug.—wkdys. & Sun. 9-6 (closed Mon.); closed all hldys. Free.
- Survey of history as expressed in arts. Paintings, sculpture, furniture, glass, gold work, ivory, graphic arts, textiles. Large murals by Diego Rivera. Lectures, movies, gallery talks.
- Farmers' Museum:** Lake Rd., Route 80, Cooperstown, N. Y. Open: May-Oct. every day 9-6. Adm. 65c.
- Early farm and handicraft tools. Schoolhouse, country store, smithy, lawyer's office. Cardiff "Giant." Operated by N. Y. State Historical Assn.
- Fenimore House:** Lake Rd., Route 80, Cooperstown, N. Y. Open: wkdys. 9-5 (Sat. 9-12), closed Sun.; Open every day May-Oct. 9-6. Adm. 65c.
- American portraits, genre paintings. Browere life masks of Founding Fathers. Hamilton-Burr Room. James Fenimore Cooper Collection. Folk art. Library. Operated by N. Y. State Historical Assn.
- Gardner (Isabella Stewart) Museum:** 280 The Fenway, Boston 15, Mass. Open: Tues., Thurs., Sat. 10-4, Sun. 1-4 (closed other days, hldys., and during Aug.). Free (children under 8 not admitted).
- Renaissance art in setting resembling Venetian palace. Painting, sculpture, tapestries, furniture. Music in Tapestry Room in afternoon of open days.
- Heard Museum:** 22 E. Monte Vista Rd., Phoenix, Ariz. Open: wkdys. & Sun. 1-5 (closed Mon.). Free.
- Prehistoric and historic pottery, blankets, beadwork, carvings, weapons, etc. from various parts of world.
- Herron (John) Art Museum:** 110 E. 16th St., Indianapolis, Ind. Open: wkdys. 9-5 (closed Mon. & hldys.), Sun. 1-6. Free.
- European paintings from Renaissance to present. American paintings of 19th and 20th centuries. Egyptian and Asiatic sculpture and ceramics.
- Huntington (Henry E.) Library and Art Gallery:** San Marino 15, Calif. Open: wkdys. & Sun. 1-4:30 (closed Mon. and during Oct.). Free (reservations must be made).
- 18th century British paintings. Library of English and American history and literature. Gutenberg Bible. Franklin's autobiography in his handwriting. Botanical garden. Research facilities.
- Layton Art Gallery:** 758 N. Jefferson St., Milwaukee 2, Wis. Open: wkdys. 9-5, Sun. 2-5. Free.
- Exhibitions of contemporary artists. Special exhibitions, lectures.
- Los Angeles County Museum:** Exposition Park, Los Angeles 7, Calif. Open: wkdys. 10-5 (Mon. 1-5, Fri. 10-5, 7-10), Sun. & hldys. 1-5. Free.
- American, European, Eastern art. American, English silver. American, African mammal groups. American Indian exhibits. California History Hall. Movies, lectures, concerts, library.
- Mint Museum of Art:** 501 Eastover Rd., Charlotte, N. C. Open: wkdys. 10-5 (closed Mon.), Sun. 3-5. Museum closed July 1-Sept. 15. Free.
- American and European paintings and prints. Period furniture. Relics of former U. S. branch mint. Eagle on façade believed to be largest carved wooden eagle in world.
- Mound State Monument Archaeological Museum:** Moundville, Ala. Open: wkdys & Sun. 8-5. Adm. 25c.
- Uncovered Indian burials, etc., of Moundville Indians. Operated by Alabama Museum of Natural History.
- Navajo Ceremonial Art, Museum of:** Camino Lejo, near old Pecos Rd., Santa Fe, N. Mex. Open: wkdys. 9-12, 1-4:30 (closed Mon.), Sun. 3-5. Adm. 25c.
- Sand paintings, ceremonial objects, baskets, blankets, silver. Music records of chants. Comparative material from Asia and elsewhere. Library.
- Nelson (William Rockhill) Gallery of Art and Atkins Museum of Fine Arts:** 4525 Oak, Kansas City 2, Mo. Open: wkdys. 10-5 (Fri. 1-5, closed Mon.), Sun. & hldys. 2-6 (closed NY Day, July 4, Thnks. Day, Xmas). Also open Fri. eves. 7-10 from Oct. 1-Apr. 30. Adm. 25c. (free Sat., Sun., hldys., Fri. eves.).
- European paintings from 13th century to present. Extensive Chinese collection. Egyptian, Greek, Roman collections. English pottery. Concerts, movies.
- New York State Historical Association:** Lake Rd., Route 80, Cooperstown, N. Y.
- Maintains Farmers' Museum and Fenimore House. See those entries.
- Newark Museum:** 49 Washington St., Newark 2, N. J. Open: Oct.-June—wkdys. 12-5:30 (Wed. & Thur. 12-5:30, 7-9:30), Sun. & hldys. 2-6; July-Sept.—wkdys. 12-5 (Thur. 12-5, 6:30-9), Sun. & hldys. 2-6. Free.

American painting and sculpture, including contemporary work. Outstanding Tibetan collection. Coins of all nations. Exhibits in mechanical motion, astronomy, natural science, anthropology. Concerts.

Ringling (John and Mable) Museum of Art: Sarasota, Fla. Open: every day 9-4:30 (Residence 10-4:30). Adm.: Art Museum 50c. Residence (incl. Circus Museum), 51. Collection of Baroque and other paintings in Art Museum. Rare household furnishings in Ringling Residence. Illustrative and historical material in Museum of the American Circus.

Rosiercrucian Egyptian, Oriental Museum: San Jose, Calif. Open: wkdys. 9-5 (Sat. 9-1), Sun. 12-5. Free.

Egyptian and Oriental antiquities. Mummies, statuary, jewelry, utensils, clothing. Reproductions of Egyptian rock tomb and temple.

(St. Louis) City Art Museum: Forest Park, St. Louis 5, Mo. Open: wkdys. & Sun. 10-5 (Mon. 2:30-9:30). Free.

Oriental and Western art and decorative arts. Paintings, sculpture, prints, ceramics, oriental rugs. Period rooms.

San Diego, Fine Arts Gallery of: Plaza de Panama, Balboa Park, San Diego, Calif. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5:30. Free.

Old European and modern American paintings, featuring also old and modern Spanish and modern French. Important collection of original prints. Old Asiatic arts. Library.

San Diego Museum of Man: California Quadrangle, Balboa Park, San Diego, Calif. Open: wkdys. 10-5 (closed Tues.), Sun. 1-5. Free.

Archaeology, anthropology, ethnology, primitive weapons, health education. Emphasis on American Indians and Central America. Library, auditorium.

San Diego Society of Natural History—Natural History Museum: San Diego, Calif. Open: wkdys. & Sun. 10-4:30 (closed Xmas, NY Day). Free.

Mammals, birds, fossils, shells, plants, insects, minerals. Emphasis on Southwestern U. S., Sonora, Lower California. Library.

San Francisco Museum of Art: War Memorial Bldg., San Francisco, Calif. Open: wkdys. 12-10 (Sat. 12-9), Sun. 1-5. Free.

Contemporary European and American paintings, drawings, prints, architecture, photographs, decorative arts, including work by San Francisco artists. Concerts and movies. Library.

Southwest Museum, Inc.: Marmion Way at Museum Dr., Highland Pk., Los Angeles 42, Calif. Open: wkdys. & Sun. 1-5 (closed Mon., Xmas, July 4). Free.

American Indian exhibits, ancient and modern. Library, lectures. Casa de Adobe, reproduction of adobe hacienda, located at 4605 N. Figueroa St.

Toledo Museum of Art: Monroe at Scottwood, Toledo 2, Ohio. Open: wkdys. 9-5 (Mon. 1-5), Sun. hldys. 1-5. Free.

Dutch, French, English, American paintings. Old Masters. Prints, manuscripts, sculpture. Ancient, modern glass. Oriental, Egyptian art. Library, concerts.

Virginia Museum of Fine Arts: Boulevard at Grove Ave., Richmond 20. Open: wkdys. 10:30-6 (closed Mon.), Sun. 2-6:00. Free (Tues., Thur., Fri., 25c. plus tax).

European, American, Oriental, Pacific Island art. Special collections: modern French, American paintings, Russian Crown Jewels. Statewide educational programs.

Wadsworth Atheneum: 25 Atheneum Sq., N., Hartford 3, Conn. Open: wkdys. 12-5 (Sat. 9-5, closed Mon., Gd. Fri., July 4, Labor Day, Thns. Day, Xmas, NY Day), Sun. 2-5. Free.

European and American paintings from 1400 to present. Bronzes, porcelain, silver. American period rooms and furniture. Library, concerts, movies.

Walters Art Gallery: Charles and Centre Sts., Baltimore 1, Md. Open: wkdys. 11-5 (July & Aug. 11-4), Sun. & hldys. 2-5 (closed NY Day, July 4, Thns. Day, Xmas). Free.

Art from ancient empires to 19th century Europe. Important collections of Etruscan art and medieval illuminated books. Original manuscript of "Star-Spangled Banner."

Worcester Art Museum: 55 Salisbury St., Worcester 2, Mass. Open: wkdys. 10-5 (Tues. in Nov.-Apr. 10-10), Sun. 2-5 (Oct.-May 2-6), hldys. 2-5 (closed July 4, Thns. Day, Xmas). Free.

Art from Egyptian to modern times, including Far East. Emphasis on painting and sculpture. Classes, lectures, concerts, films. Professional art school.

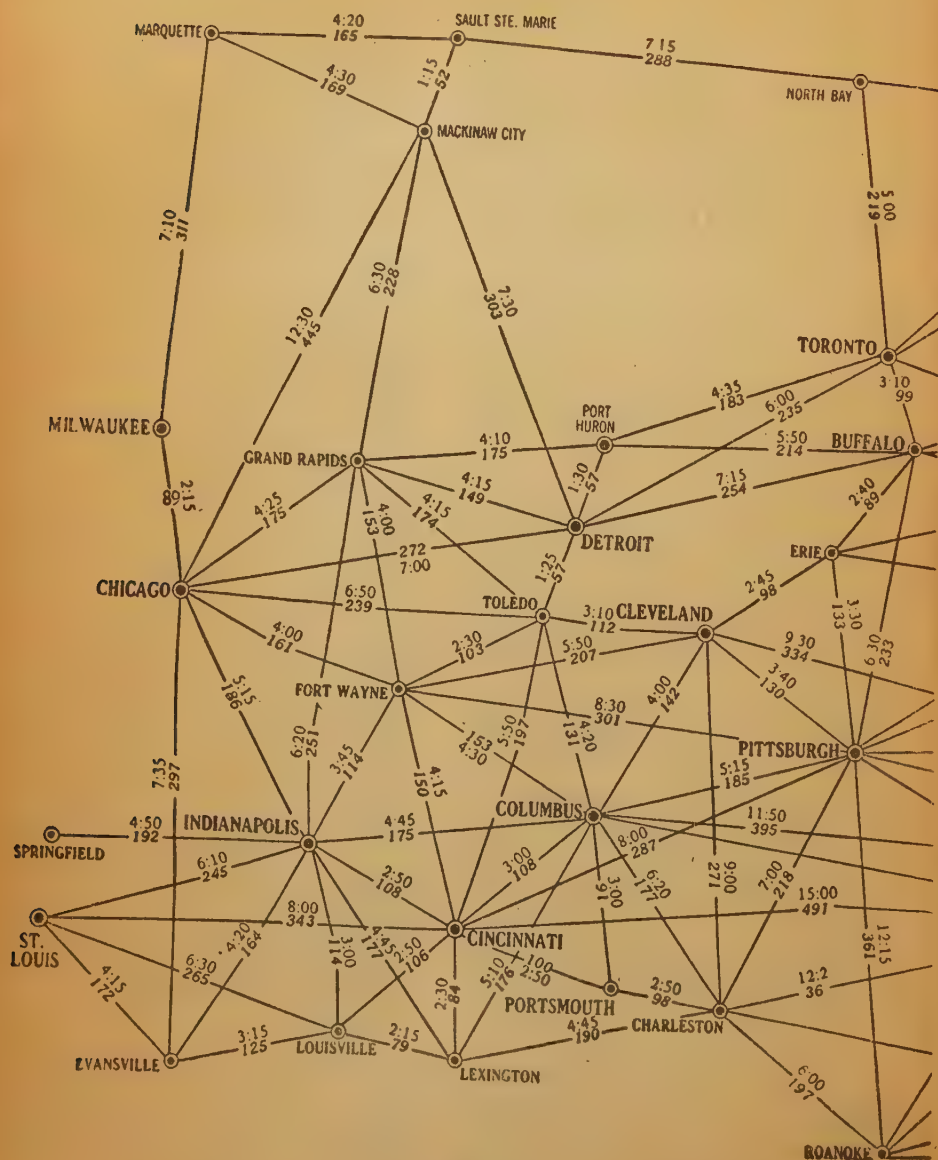
Flowers of the Month

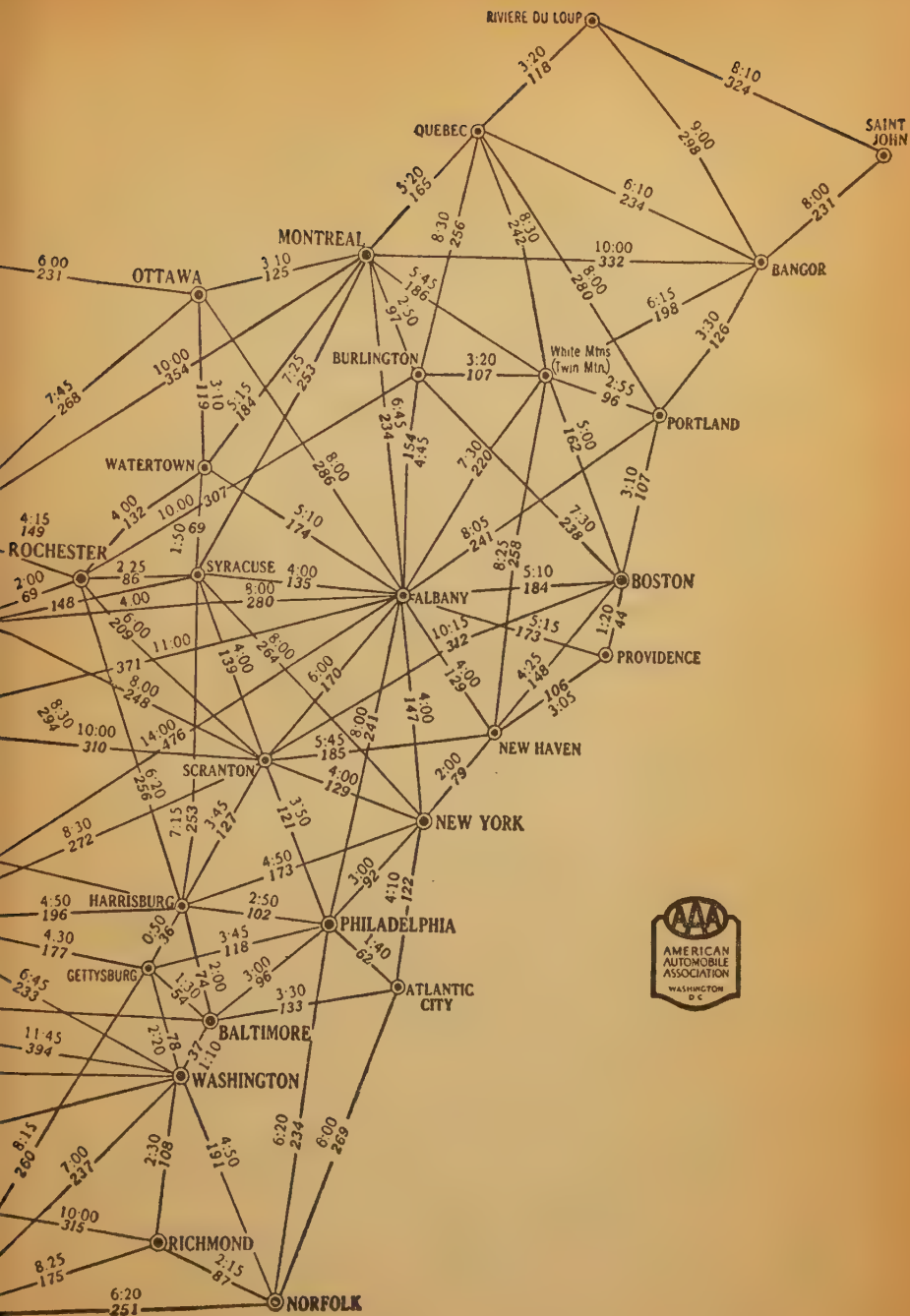
January Carnation
February Violet
March Jonquill
April Sweet pea
May Lily of the valley
June Rose

July Larkspur
August Gladiolus
September Aster
October Pompon
November Chrysanthemum
December Poinsettia

NORTHEASTERN MILEAGE CHART

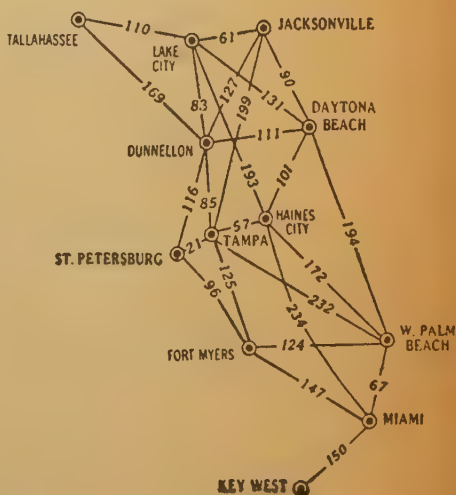
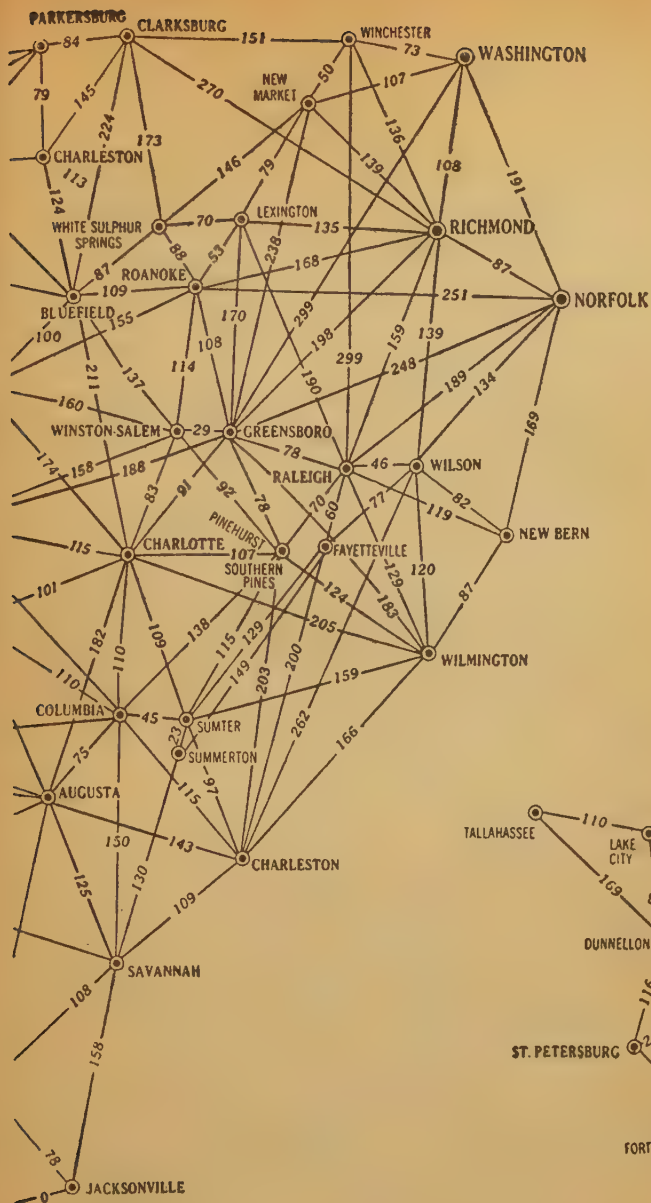
Numerals set into lines indicate mileage. Numerals above or below indicate average driving time.

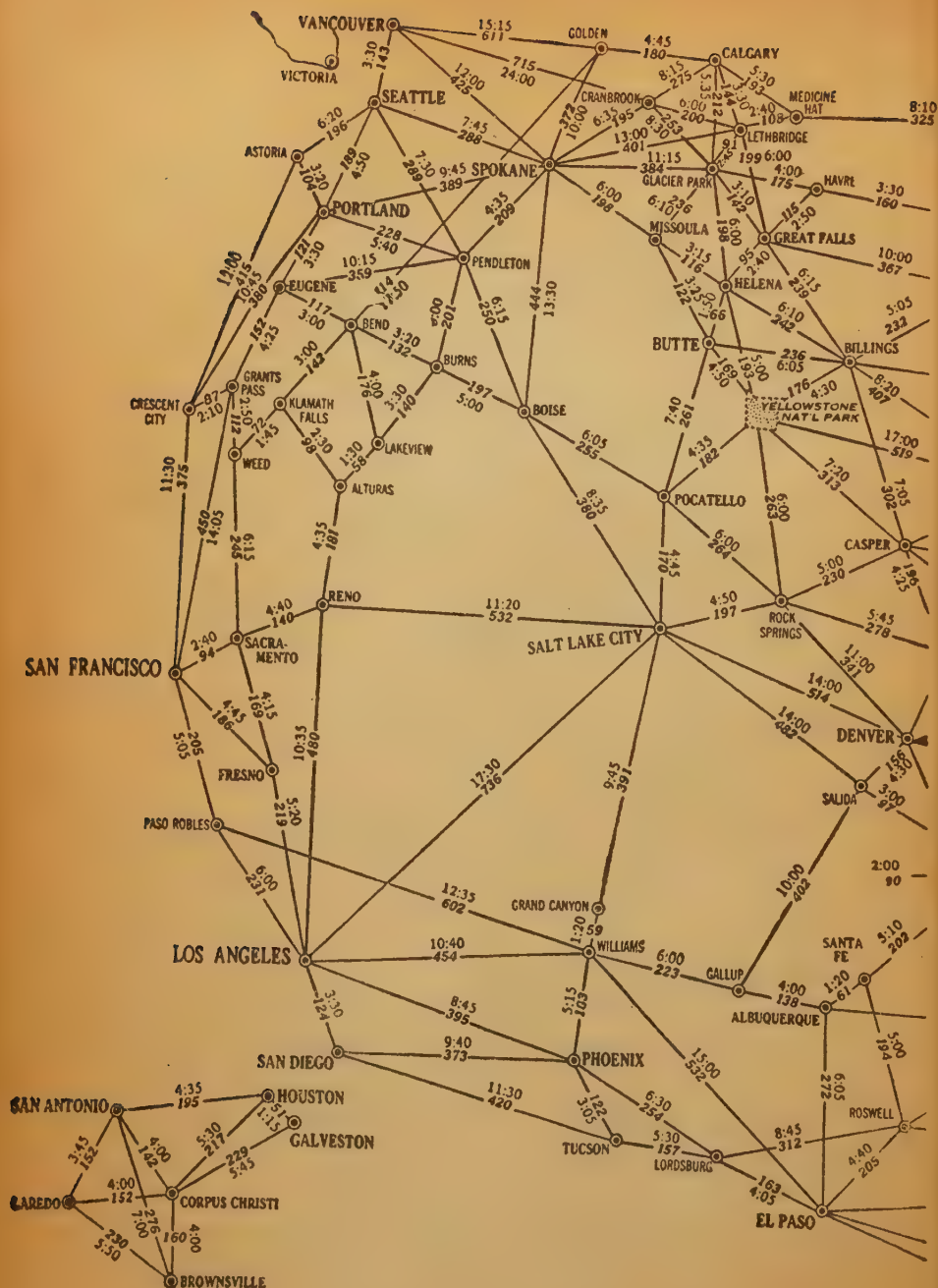




Numerals are mileages between towns.

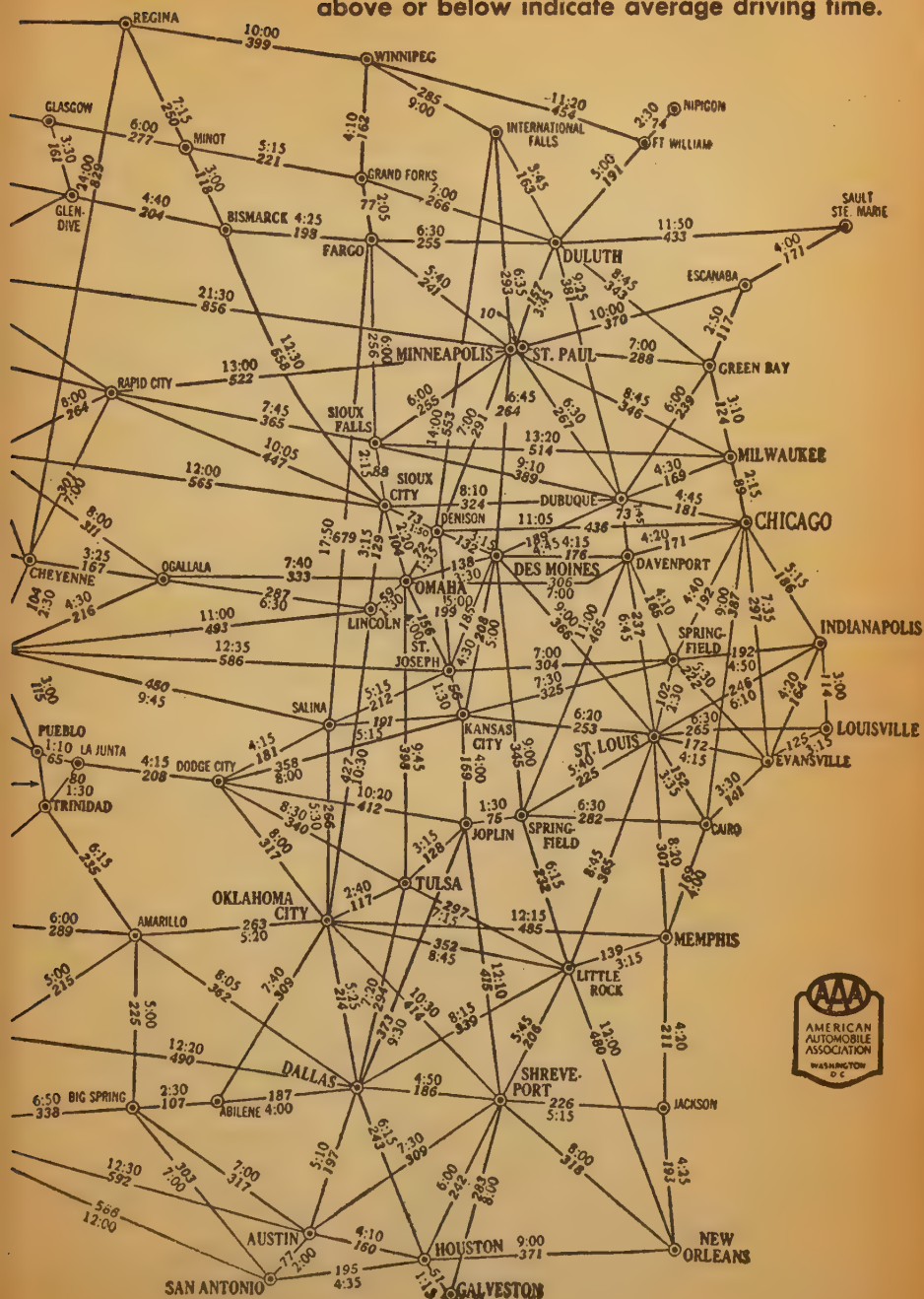






WESTERN MILEAGE CHART

Numerals set into lines indicate mileage. Numerals above or below indicate average driving time.



U. S. Postal Regulations

Source: U. S. Post Office.

FIRST CLASS (LIMIT 70 LB.):

Letters and written and sealed matter: 3¢ for each oz., local and nonlocal, except that drop letters are subject to 1¢ for each oz. when deposited for local delivery at offices not having letter-carrier service, provided they are not collected or delivered by rural or star-route carriers.

Government postal cards: 1¢.

Private mailing or post cards: 1¢.

AIR MAIL (LIMIT 8 OZ.):

6¢ for each oz. or fraction thereof within the continental U. S., within any Territory or possession of the U. S., within any geographical area which is a protectorate of the U. S., or between any of the foregoing. This includes air mail to or from Alaska, Hawaii, Puerto Rico, Virgin Islands of the U. S., Canton Island, Canal Zone, Guam and any other place where the U. S. mail service is in operation.

AIR PARCEL POST (OVER 8 OZ. TO 70 LB.):

The zone rates prescribed for parcels carried by air (including other transportation to and from air-mail routes) shall apply to mailable matter of any class weighing over 8 oz. but not more than 70 lb. nor exceeding 100 in. in length and girth combined, including written and other matter of the first class, whether sealed or unsealed, except that in the case of mail of the first class the rate shall not be less than 3¢ an oz. or fraction thereof.

The rate of 6¢ an oz. or fraction thereof will apply (until otherwise instructed) to all domestic air mail weighing up to and including 8 oz., regardless of distance or zone; the zone rates prescribed by Public Law 819, will apply to such mail weighing over 8 oz., fractions of a lb. being charged as a full lb. (provided that on air mail of the first class the rate shall not be less than 3¢ an oz. or fraction thereof).

Air Parcel-Post Zone Rates

Zone and (miles)	First lb.	Add. lbs.
First & Second (to 150)	55¢	4¢
Third (150-300)	60¢	8¢
Fourth (300-600)	65¢	14¢
Fifth (600-1,000)	70¢	24¢
Sixth (1,000-1,400)	75¢	33¢
Seventh (1,400-1,800)	75¢	45¢
Eighth (over 1,800)	80¢	65¢

Exceptions

The rate of 80¢ for first lb. (over 8 oz. to 1 lb.) and 80¢ for each additional lb. or fraction thereof shall be charged on parcels transported by air as follows:

(a) Between any point in continental U. S. and any point in its Territories and possessions falling in the eighth delivery zone, namely, Hawaii, Alaska, Guam, etc.

(b) Between or within Territories and possessions of the U. S. where the eighth zone is applicable.

(c) Between continental U. S. or its Territories and possessions and the Canal Zone.

(d) Between U. S. or its Territories and possessions and overseas A.P.O.'s and Fleet Post Offices.

(e) Between U. S. or its Territories and possessions and U. S. naval vessels stationed in foreign waters if foreign port is used as part of address.

SECOND CLASS (NO LIMIT OF WEIGHT):

Newspapers, magazines and other periodicals containing notice of second-class entry: 1¢ for each 2 oz. or fraction thereof, or the fourth-class rate, whichever is cheaper.

FOURTH CLASS (PARCEL POST) (OVER 8 OZ. TO 70 LB.):

Merchandise, books, printed matter and all other mailable matter not in first or second class.

Limit of size: 100 in. length and girth combined.

Parcel-Post Zone Rates

Zone and (miles)	1st lb.	2-10 lb.* per lb.	11-70 lb.† per lb.
Local	\$.10	\$.01	\$.0075
First & Second (to 150) .....	.12	.021	.02
Third (150-300) .....	.13	.03	.028
Fourth (300-600) .....	.14	.045	.0425
Fifth (600-1,000) .....	.15	.06	.055
Sixth (1,000-1,400) .....	.16	.075	.0725
Seventh (1,400-1,800) .....	.17	.095	.0925
Eighth (over 1,800) .....	.18	.115	.1125

* Figure the first lb. from the first column, the remainder of lbs. from this column. † Figure the first lb. from the first column, the next 9 lb. from the second, and the remainder of lbs. from this column.

THIRD CLASS (LIMIT 8 OZ.):

PIECE RATE:

Circulars and merchandise, except seeds, plants, etc.: 2¢ for first 2 oz., 1¢ each additional oz.

Books and catalogues of 24 pages or more, seeds, plants, etc.: 1½¢ for each 2 oz.

Minimum third-class charge for pieces of odd size or form: 3¢.

THIRD CLASS—BULK RATE:

Circulars and merchandise (not less than 20 lb. or 200 pieces): 14¢ per pound, minimum of 1¢ each.

Books and catalogues of 24 pages or more, seeds, plants, etc. (20 lb. or 200 pieces): 10¢ per lb., minimum of 1¢ each.

Annual fee for mailings of third-class matter at bulk rate: \$10 per calendar year.

NOTE: For conditions and restrictions governing mail to armed forces overseas, consult postmaster.

BOOKS (LIMIT 70 LB.):

Books (containing no advertising matter other than incidental announcements of books) for all zones: 8¢ first lb., 4¢ each additional lb.

LIBRARY BOOKS (LIMIT 70 LB.):

Books sent by authorized libraries to readers and when returned by such readers, for delivery within the first three zones or the state in which mailed: 4¢ first lb., 1¢ each additional lb.

SPECIAL DELIVERY AND SPECIAL HANDLING:

The prepayment of the special-delivery fee entitles mail to the most expeditious handling and transportation possible, and also entitles it to special delivery at the office of address.

Prepayment of the special-handling fee entitles fourth-class matter to the most expeditious handling, transportation and delivery possible, but not special delivery at the office of address.

Fees for Special Delivery and Special Handling

Weight	Special delivery			Special handling (4th class only)
	First class	2nd. 4th class	3rd.	
Up to 2 lb.	15¢	25¢	15¢	
2 to 10 lb.	25¢	35¢	20¢	
Over 10 lb.	35¢	45¢	25¢	

MONEY ORDERS AND POSTAL NOTES:

Money orders for amounts from 1¢ to \$100 are issued upon written application made by the remitter or his agent showing the amount of the order and the names and complete addresses of the payee and remitter. Fees are as follows:

Amount of order	Fee
\$.01 to \$ 5.00	10¢
5.01 to 10.00	15¢
10.01 to 50.00	25¢
50.01 to 100.00	35¢

Postal notes for amounts from 1¢ to \$10 are issued without written application for a fee of 8¢ each.

REGISTERED MAIL:

Fees for domestic registered mail (first-, second- and third-class matter, and sealed fourth-class matter on which postage at the first-class rate has been paid):

Indemnity limit	Fee
\$.01 to \$ 5.00	25¢
5.01 to 25.00	35¢
25.01 to 50.00	40¢
50.01 to 75.00	45¢
75.01 to 100.00	50¢
100.01 to 200.00	60¢
200.01 to 300.00	70¢
300.01 to 400.00	85¢
400.01 to 500.00	1.00
500.01 to 600.00	1.10
600.01 to 700.00	1.20
700.01 to 800.00	1.30
800.01 to 900.00	1.40
900.01 to 1000.00	1.50

For registered mail having a declared value in excess of the maximum indemnity covered by the registry fee paid there shall be charged additional fees (surcharges) as follows:

When declared value exceeds maximum indemnity covered by registry fee paid—	Fee
By not over \$50	2¢
By over \$50 but not over \$100	3¢
By over \$100 but not over \$200	4¢
By over \$200 but not over \$400	6¢
By over \$400 but not over \$600	7¢
By over \$600 but not over \$800	8¢
By over \$800 but not over \$1000	10¢

If the excess of the declared value over the maximum indemnity covered by the registry fee paid is \$1,000 or more, the additional fees for each \$1,000 or part of \$1,000 on articles destined to points within the several zones applicable to fourth-class matter shall be as follows:

Zone	Fee
For local delivery or for delivery within 1st zone	11¢
For delivery within 2nd zone	12¢
For delivery within 3rd zone	14¢
For delivery within 4th zone	15¢
For delivery within 5th or 6th zones	16¢
For delivery within 7th or 8th zones	18¢

In the case of nonnegotiable securities, surcharge is based on known or estimated cost of duplication.

Registration fee for mail without intrinsic value for which no indemnity is paid: 25¢.

INSURED MAIL:

Fee for insured mail (savings bonds, stubs, etc.) treated as registered mail under special authorization by the Department: 20¢.

Fees for domestic insured mail (third- and fourth-class matter):

Indemnity limit	Fee
\$.01 to \$ 5.00	5¢
5.01 to 10.00	10¢
10.01 to 25.00	15¢
25.01 to 50.00	20¢
50.01 to 100.00	25¢
100.01 to 200.00	30¢

C.O.D. MAIL:

Fees for domestic unregistered C.O.D. mail (third- and fourth-class matter and sealed domestic mail matter of any class bearing postage at the first-class rate):

Indemnity limit	Fee
\$.01 to \$ 2.50	20¢
2.51 to 5.00	25¢
5.01 to 25.00	35¢
25.01 to 50.00	45¢
50.01 to 100.00	55¢
100.01 to 150.00	60¢
150.01 to 200.00	65¢

Fees for domestic registered C.O.D. mail (sealed domestic mail of any class bearing postage at the first-class rate):

Amount collectible and indemnity payable	Fee
\$.01 to \$ 10.00	.55
10.01 to 50.00	.70
50.01 to 100.00	.90
100.01 to 200.00*	1.15

* Limit of collections.

When indemnity in excess of \$200 is desired, the fees for domestic registered C.O.D. mail are:

Indemnity limit	Fee
\$200.01 to \$ 300.00	\$1.20
300.01 to 400.00	1.25
400.01 to 500.00	1.30
500.01 to 600.00	1.35
600.01 to 700.00	1.40
700.01 to 800.00	1.45
800.01 to 1000.00	1.55

MISCELLANEOUS:

Fees for senders' return receipts for domestic registered and insured mail: when

requested at time of mailing, 5¢; when requested after time of mailing, 10¢; when requested showing to whom, when, and the address where the article was delivered, 31¢.

Fees for effecting delivery of domestic registered, insured, and C.O.D. mail to addressee only or to addressee or order: 20¢.

Fee for notifying sender or his representative of inability to deliver a C.O.D. article: 5¢.

A demurrage charge of 5¢ a day is collected on each C.O.D. article which the addressee fails to accept within 15 days after the first attempt to deliver or the first notice of arrival at the office of address is given.

Certificates of mailing for ordinary mail of any class and additional certificates for ordinary, registered, insured and C.O.D. mail: 1¢ for each article described thereon.

The sending of registered or insured mail to Army and Navy personnel overseas is restricted. Consult postmaster for details. C.O.D. mail cannot be sent to Navy personnel on board ships or at overseas shore stations.

FOREIGN REGULAR MAIL:

South and Central America (except European possessions), Canada, Cuba, Dominican Republic, Haiti, Andorra, Spain and Philippines: letters, 3¢ an oz. or fraction thereof; post cards, 2¢ single, 4¢ reply-paid.

Other countries: letters, 5¢ first oz., 3¢ each additional oz. or fraction thereof; post cards, 3¢ single, 6¢ reply-paid.

FOREIGN AIR MAIL:

Articles for transmission by air to any foreign country should have affixed the blue "Par Avion/By Air Mail" label (Form 2978). That label, however, is not to be affixed to articles intended for transmission by air within the U. S. only.

The Postmaster General's staff was established Jan. 22, 1946, by an order of the Postmaster General. It is the coordinating body of the Post Office Department, insuring uniformity of policy among the several bureaus and offices of the Department.

The Postmaster General's staff consists of the Deputy Postmaster General, the Assistant Postmasters General, the Administrative Assistant to the Postmaster General, the Solicitor, the Chief Post Office Inspector, the Executive Assistant to the Postmaster General, the Chief Clerk and Director of Personnel, the Comptroller, and the Purchasing Agent. The Deputy Postmaster is Chairman.

The highest price ever paid for a single postage stamp was reputed to have been more than \$45,000. It was a 1-cent British Guiana issue from the Arthur Hind collection sold at auction during 1933-34.

Air-Mail Rates per Half Ounce in Cents from U. S. to:

Aden.....	25	Ecuador.....	10	Leeward Islands.....	10	St. Christopher.....	10
Afghanistan.....	25	Egypt.....	15	Liberia.....	25	St. Eustatius.....	10
Albania.....	15	El Salvador.....	10	Libya.....	15	St. Helena.....	25
Algeria.....	15	England.....	15	Liechtenstein.....	15	St. Kitts.....	10
Andorra.....	15	Eritrea.....	25	Lithuania (n S.S.R.).....	15	St. Lucia.....	10
Anglo-Egyptian Sudan.....	25	Estonia (n S.S.R.).....	15	Luxemburg.....	15	St. Martin.....	10
Angola.....	25	Ethiopia.....	25	Macao.....	25	St. Pierre & Miquelon	
Anguilla.....	10	Faeroe Islands.....	16	Madagascar.....	25	(per oz.).....	08
Antigua.....	10	Falkland Islands.....	10	Madeira.....	15	St. Vincent.....	10
Argentina.....	10	Fiji Islands.....	25	Malayan Union.....	25	Salvador, El.....	10
Aruba.....	10	Finland.....	15	Malta.....	15	Samoa, Western.....	25
Ascension Island.....	15	France.....	15	Manchuria.....	25	San Marino.....	15
Australia.....	25	French Equatorial		Martinique.....	10	Santa Cruz Islands.....	25
Austria.....	15	Africa.....	25	Mauritania.....	25	Sarawak.....	25
Azores.....	15	French Guinea.....	10	Mauritius.....	25	Saudi Arabia.....	25
Bahamas.....	10	French Guinea.....	25	Mexico (per oz.).....	06	Scotland.....	15
Bahrain Island.....	25	French Pacific Settle-		Monaco.....	15	Senegal.....	25
Balearic Islands.....	15	ments.....	25	Montserrat.....	10	Seychelles.....	25
Baluchistan.....	25	French India.....	25	Morocco (all zones).....	15	Sierra Leone.....	25
Barbados.....	10	French Indo-China.....	25	Mozambique.....	25	Singapore.....	25
Belgium.....	15	French Somaliland.....	25	Nauru.....	25	Solomon Islands.....	25
Bermudas.....	10	French Sudan.....	25	Netherlands.....	15	Somaliland Protector-	
Bhutan.....	25	French Togoland.....	25	Netherlands Indies.....	25	ate.....	25
Bolivia.....	10	Gambia.....	15	Nevia.....	10	South West Africa.....	25
Bonaire.....	10	Germany.....	15	New Caledonia.....	25	Southern Rhodesia.....	25
Brazil.....	10	Gibraltar.....	15	New Guinea.....	25	Spain.....	15
British Cameroons.....	25	Gilbert & Ellice Islands		New Hebrides.....	25	Spanish Guinea.....	25
British Guiana.....	10	Gold Coast.....	25	New Zealand.....	25	Straits Settlements.....	25
British Honduras.....	10	Great Britain.....	15	Nicaragua.....	10	Surinam.....	10
Brunei.....	25	Greece.....	15	Niger.....	25	Sweden.....	15
Bulgaria.....	15	Grenada.....	10	Nigeria.....	25	Switzerland.....	15
Burma.....	25	Grenadines.....	10	North Borneo, State of		Syria.....	25
Cambodia.....	25	Guadeloupe.....	10	North Ireland.....	15	Taiwan (Formosa).....	25
Cameroon.....	25	Guatemala.....	10	Northern Rhodesia.....	25	Tanganyika Territory.....	15
Canada (per oz.).....	08	Haiti.....	10	Norway.....	15	Thailand.....	25
Canary Islands.....	25	Honduras.....	10	Nyasaland.....	25	Tibet.....	25
Cape Verde Islands.....	25	Hong Kong.....	25	Okinawa.....	25	Tonga Islands.....	25
Ceylon.....	25	Hungary.....	15	Pakistan.....	25	Trieste.....	15
Chile.....	10	Iceland.....	15	Palestine (Arab).....	25	Trinidad.....	10
China.....	25	India.....	25	Panama.....	10	Tripolitania.....	15
Colombia.....	10	Indonesia.....	25	Papua.....	25	Tristan da Cunha.....	25
Cook Island.....	25	Iran.....	25	Paraguay.....	10	Tunisia.....	15
Corsica.....	15	Ireland.....	15	Peru.....	25	Turkey.....	15
Costa Rica.....	10	Israel.....	25	Philippines.....	25	Turks Island.....	10
Crete.....	15	Italian Somaliland.....	25	Poland.....	15	Uganda.....	25
Cuba.....	08	Italy.....	15	Portugal.....	15	Union of South Africa.....	25
Curaçao.....	10	Ivory Coast.....	25	Portuguese East Africa		U.S.S.R.....	25
Cyprus.....	25	Jamaica.....	10	Portuguese Guinea.....	25	Uruguay.....	10
Czechoslovakia.....	15	Japan.....	25	Portuguese India.....	25	Vatican City State.....	15
Dahomey.....	25	Jordan.....	25	Portuguese Timor.....	25	Venezuela.....	10
Denmark.....	15	Kenya.....	25	Portuguese West Africa		Viet-Nam.....	25
Dodecanese.....	15	Korea (service suspended)		Redonda.....	10	Virgin Islands (British)	
Dominica.....	10	Kuwait (Persian Gulf).....	25	Réunion.....	25	Wales.....	15
Dominican Republic.....	10	Labuan.....	25	Rio de Oro.....	25	Windward Islands.....	10
Dubai (Persian Gulf).....	25	Laos.....	25	Rumania.....	15	Yemen.....	25
		Latvia (n S.S.R.).....	15	Ryukyu Islands.....	25	Yugoslavia.....	15
		Lebanon.....	25	Saba.....	10	Zanzibar.....	25

* Registered and unregistered articles in regular mails for Formosa (Taiwan) will be accepted for air transmission to destination. Unregistered articles for rest of China (except Hainan Island), Manchuria and Mongolia, prepaid at air-mail rate, will be accepted for air transmission to Hong Kong, with onward transmission by surface means. Air mail service to Hainan Island is suspended. † Service restricted to: Babelahira, Beit Jala, Beit Sabour, Bethlehem, Gaza, Hebron, Jenin, Jericho, Jerusalem, Khan Yunis, Nablus, Qalqilia, Ramallah and Tulkarem.

The U. S. Postal System

Source: U. S. Government Organization Manual.

While the original purpose of the Postal System was to provide "the best means of establishing posts for conveying letters and intelligence through this continent" (Journals of the Continental Congress, May 27, 1775), the Post Office Department was ultimately enlarged to include other services. Among the most important were: postage stamps (1847), registered mail (1855), railway mail service (1862), city delivery service (1863), postal money orders (1864), foreign money orders (1867), special delivery (1885), rural delivery (1896), postal savings (1911), village delivery (1912), parcel post, including insurance and collection-on-delivery (1913), air mail (1918).

Benjamin Franklin, who was appointed postmaster at Philadelphia in 1737 and Co-Deputy Postmaster General of the British Colonies in North America in 1753, and who on July 26, 1775, became the first Postmaster General under the Continental Congress, is credited with having laid much of the foundation for the development of the present Postal System.

Samuel Osgood was the first Postmaster General under the Constitution, having been appointed Sept. 26, 1789, at which time there were 75 post offices. From that small beginning, the Postal Service has been developed into what is now the largest business in the world.

THE RISE OF THE UNITED STATES

by ARTHUR M. SCHLESINGER, SR.

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1. Under the English Flag

The land now comprehended within the United States once belonged to Spain, France, England, Holland and Sweden. Spain, colonizing from Mexico in the sixteenth and seventeenth centuries, expanded over most of the Gulf Coast, Texas and the border zone westward through California. France, moving down from Canada in the eighteenth century, annexed the Mississippi Valley from the Appalachians to the Rockies. Meanwhile, in the seventeenth century, the English began peopling the Atlantic shore, and finding the Dutch already established in the present New York and the Swedes in Delaware, seized their possessions.

Notwithstanding this varied international background, United States history has been largely the product of influences emanating from the seaboard communities. Unlike the Spanish and French, the English regarded their colonies as genuine extensions of the homeland, and the settlers sowed English customs, institutions and speech so thoroughly that they eventually spread everywhere. True, the transplanted ways underwent modification, but this arose from necessities imposed by a wilderness existence and, as time went on, from a growing sense of self-sufficiency.

Organized settlement began in 1607 at Jamestown, where the first representative assembly was set up in 1619. The Pilgrims followed at Plymouth in 1620, spearheading a much larger migration of Puritans into New England. Later in the century the Quakers occupied a midway region owned by William Penn, making Philadelphia their headquarters and fanning out in every direction. By 1700 all the thirteen colonies existed but the southernmost, Georgia, which came into being in 1733. The settlers crossed the ocean to escape economic, religious and political oppression and to start anew in a land of greater opportunity.

In time, other strains reinforced the original English population: French Huguenots, Scotch Irish, Germans and minor groups, including the Dutch and Swedes already on hand. African slaves, first introduced at Jamestown in 1619, were welcomed in all the colonies, though the economic need for them was greater in the South, and the system took deeper root there than elsewhere. The people in the North engaged mainly in small farming, fishing and commerce, the Southerners largely in plantation production. Everywhere the colonists practiced self-government. When they clashed with the English-appointed governors, the colonists usually

won out by withholding appropriations.

As the population penetrated farther inland, the settlers encountered the French guarding Canada and the eastern fringes of the Mississippi Valley. In a succession of wars (1689-1763), paralleling greater struggles between the parent nations abroad, France was finally ejected from North America and Britain's dominion extended to the Mississippi. Spain fell heir to the country west of the river, though some years later Napoleon was temporarily to reclaim it for France.

2. Birth of the Nation

With the removal of the Gallic menace the colonists felt less dependent upon the mother country militarily, and England's change from her former policy of "salutary neglect" aroused active resentment. A series of revenue measures, starting with the Sugar Act of 1764, provoked meetings of protest, nonimportation pacts and mob demonstrations in America. Colonial home rule was at stake, also freedom of trade, and the provincials appealed to the principle: "No taxation without representation." Parliament's action in 1774 penalizing all Massachusetts for the deed of a few in dumping dutied tea into Boston Harbor led to the first armed clash at Concord and Lexington on April 19, 1775; but a year and more passed before the patriots resolved upon the hazardous step of independence. The famous Declaration of July 4, 1776, penned by Thomas Jefferson for the Second Continental Congress, justified revolution as the only means to guarantee the "unalienable Rights" of "Life, Liberty and the pursuit of Happiness." Under George Washington as commander in chief the fighting shifted from New England into the middle states and then into the south. General Gates's victory at Saratoga on October 17, 1777, brought England's ancient enemy, France, into the war; just four years later the British yielded to the Allies at Yorktown. The Peace Treaty in 1783 recognized the United States as stretching to the Mississippi.

The infant, though born and baptized, had yet to be weaned. The league of states, formed under the Articles of Confederation in 1781, proved too weak either to deal effectively with foreign countries, or to raise necessary funds, or to ensure unrestricted domestic trade. Within the states, however, Revolutionary idealism prompted action to forbid primogeniture and tax-supported religions, and the Northern commonwealths abolished slavery, a prohibition which Congress's Ordinance of 1787 extended to the territory north of the Ohio. Feebleness of government, combined

with social disturbances culminating in Shays's Rebellion in Massachusetts, made sober men tremble for the sanctity of property rights and seemed to cloud the nation's future. The Federal Convention, summoned in 1787, designed a new framework after much wrangling between rival interests and sections.

The Constitution established a government of three separate and co-ordinate departments—legislative, executive and judicial—each endowed with adequate power, and each to serve as a check and balance on the others. Within its own sphere the general government was supreme, and it exerted its will not through state officials, as under the Articles of Confederation, but immediately upon individuals. Direct popular representation was limited to the House of Representatives, the Senate being chosen by the legislatures (a system which lasted till 1913), the President designated by Electors (who in practice, however, quickly lost their deliberative function), and the Supreme Court appointed by the President and Senate for life. Opposed in many states because of its centralizing and undemocratic features, the Constitution eventually won adoption on the assurance that a bill of rights would be added to preclude federal interference with civil liberties such as freedom of speech, the press and religion. The first ten amendments, in 1791, fulfilled the promise.

Perhaps no convention would have ratified the Constitution if it had been realized that an indivisible Union would ensue. The framers, engaged in the practical task of curing the defects of the Confederation government, strewed phrases through the document that had contradictory implications. On the basis of the text it was possible for equally honest men to maintain that the states were more powerful than the nation, or that the nation overtopped the states. At one time or other nearly every legislature, given what it considered sufficient provocation, asserted the right of nullification or secession. Short of such extreme doctrines, controversy began almost immediately over the question of whether the Constitution should be construed broadly to enhance the national authority or narrowly to lessen it.

Under George Washington, President from 1789 to 1797, the new government became a going concern. Congress, guided by Secretary of the Treasury Alexander Hamilton, buttressed the public credit by arranging to pay at par the national debt and the war-incurred state debts and by creating a United States Bank modeled upon the Bank of England. These measures, especially the last, alarmed Jefferson, veteran liberal and Washington's Secretary of State. Fearing that the legislation would build up a dangerous moneyed class, he urged a strict interpretation of the Con-

stitution in opposition to Hamilton's loose-construction views. The French Revolution widened the breach, for the Jeffersonian Democrats applauded as an upsurge of liberty what the Federalists dreaded as an irruption of chaos. But both men, knowing America's defenseless state, backed Washington's decision to maintain neutrality in France's war with England. Returned to power under John Adams, the Federalists in 1798, however, declared naval hostilities against France and passed the Alien and Sedition Acts to muzzle opposition criticism. Though Adams, defying his party, prevented a full-scale war, he lost the election of 1800 to Jefferson. The Federalists never saw office again.

3. Democracy and Nationalism

The farming interest, which Jefferson deemed the bulwark of free government, had steadily increased since the Revolution. As settlers trekked inland, new states joined the original thirteen: Vermont, Kentucky and Tennessee in the 1790's, with Ohio and others shortly to follow. Western pioneer life begot an intense individualism, fostered political and economic democracy, stimulated nationalism. In the South, by contrast, Eli Whitney's invention of the cotton gin in 1793 opened the way for plantation agriculture and Negro slavery to expand westward beyond the Mississippi. The growth of manufacturing in the Northeast introduced a third element into the scene. The rivalries of these sectional forces wove the principal strands of American history until the Civil War. Toward the mid-century the situation was further confused by the spread of manhood suffrage and a sudden mass immigration from Ireland and Germany.

Jefferson inaugurated the "Virginia Dynasty," his eight years giving way to two terms each of James Madison and James Monroe. He performed his greatest service by purchasing Louisiana from Napoleon in 1803, an act which, though violating his constitutional scruples, carried the flag to the Rockies and vastly enlarged the agricultural domain. With France and England again locked in conflict, depredations on American commerce gave constant provocation to war, but the peace-loving Jefferson applied economic sanctions in the form of an embargo keeping merchantmen at home. Such measures failed, however, and under Madison in 1812 Congress, goaded by the Warhawks, mostly Westerners, declared war on England. Unlike France, she had compounded her offenses by impressing American sailors and, moreover, lay exposed to land attack in Canada. But the assaults on Canada miscarried, and Britain's attempts at counter-invasion with veterans freed by Napoleon's defeat in 1814 fared little better. Unhappily, An-

drew Jackson's victory at New Orleans on January 8, 1815, occurred two weeks too late to affect the Peace Treaty of Ghent, which settled none of the prewar disputes.

Nevertheless the war experience greatly accelerated American nationalism. In 1816 Congress enacted the first protective tariff and chartered a new United States Bank on the model of Hamilton's. In 1819 the country acquired the Gulf region from Spain, who chose to sell rather than have it seized. In 1823 the President, prompted by successful revolutions in Latin America, proclaimed the Monroe Doctrine, warning Europe to keep hands off this new area of freedom.

Other events, however, prefigured growing sectional discord. Opposition to admitting Missouri as a slave state was ended in 1820 only by Congress's agreeing that the rest of the Louisiana Purchase north of the parallel marking her southern boundary should be free soil. Successive tariffs alienated Southerners as class legislation discriminating against their welfare. Touted by the astute South Carolinian, John C. Calhoun, they refurbished the doctrine of state rights as defensive armor. John Quincy Adams's administration (1825-1829) did nothing to improve conditions, and the advent of his successor, Jackson, precipitated a crisis.

Old Hickory, as indomitable in peace as in war, acted boldly amid divisive tendencies, whether from the slavocracy or the money power. When South Carolina nullified the Tariff of 1832, he prepared for military action, whereupon the state accepted Congress's olive branch of a lower scale of duties. He smote financial privilege by destroying the Second United States Bank, which wielded monopolistic control over the nation's credit facilities. After eight years Jackson's lieutenant, Martin Van Buren, took over, but a business depression following the Panic of 1837 so discredited his administration that in 1840 the Whigs uproariously elected William Henry Harrison in the famous log-cabin campaign. He died after a month in office, however, and the Whigs fared hardly better with his unintended successor, John Tyler, whose strict-constructionist predictions foiled their plan to establish a third national bank.

Within the free states these years witnessed a ceaseless ferment of humanitarian agitation: crusades for public education, temperance, prison reform, labor's rights, women's rights. Humane people, viewing slavery as an anachronism and a sin, formed organizations to urge its abolition. The moderate-minded, content with demanding its exclusion from the territories, founded a series of unsuccessful parties, beginning with the election of 1840. The

South, frightened by these threats to its cherished institution, found little good in any of the movements and regarded the restless North with mounting apprehension.

4. Sectional Conflict

Western expansionist zeal plus the Southern desire for more slave territory elected James K. Polk over his Whig rival, Henry Clay, in 1844. When the outgoing Congress executed the Democratic pledge to annex Texas, Polk proceeded to high-pressure England into partitioning the jointly held Oregon country at the forty-ninth parallel, and in 1846, while that was still under way, contrived a war with Mexico to acquire California and the territory eastward to Texas. American forces quickly overran northern Mexico and California, but a fiercely contested march from Veracruz through the mountains to Mexico City proved necessary before Polk achieved his goal in the Treaty of Guadalupe Hidalgo early in 1848.

The conquests approximately completed the present continental boundaries. The immediate effect, however, was to arouse sectional dissention over the question of slavery in the new Southwest. Zachary Taylor, elected by the Whigs in 1848, died in office after sixteen months, leaving the crisis in the lap of Millard Fillmore. The Compromise of 1850, piloted through Congress by Henry Clay, admitted California as a free state, left slavery in Utah and New Mexico territories to future judicial determination, and disposed of other disputes. But the settlement soon turned into unsettlement, for Fillmore's Democratic successors, Franklin Pierce and James Buchanan, supported pro-Southern policies.

The Kansas-Nebraska Act of 1854, authorizing slavery by "popular sovereignty" in the country just west of Missouri and Iowa, outraged Northerners as a base repudiation of the historic Missouri Compromise. Guerrilla warfare followed in Kansas, while in the free states the old-time antislavery elements joined with dissident Whigs and Democrats to organize the Republican party. The Republicans insisted that slavery be kept out of all federal territories. Angry contests on the floors of Congress operated like a war of nerves, convincing each side that the other was plotting its ruin. John Brown's insane attempt in 1859 to incite a servile insurrection merely poured oil on the flames. When the Republicans in 1860 elected Abraham Lincoln over a divided Democratic opposition, eleven slave states, appealing to state-rights principles, seceded and established the Confederate States of America.

For the hostilities that ensued, the North possessed the long-run advantage

of superior economic resources and man power, but before these could come into play, the South hoped to win by military prowess and perhaps by the intervention of England, which needed Southern cotton. England, however, never went quite so far, and the Southern authorities failed also to reckon with the inspired leadership of President Lincoln, who taught his people that the preservation of the Union involved not only their country's future but the democratic hope everywhere. While the North went about establishing a blockade by sea, the Confederates under Robert E. Lee brilliantly repulsed repeated land attacks on their capital, Richmond, and countered with battles on Northern soil at Antietam in 1862 and Gettysburg in 1863. But in the west they steadily lost ground until the Union forces late in 1864 swept around the southern tip of the mountains into Lee's rear and, by a pincers movement with Ulysses S. Grant before Richmond, brought final defeat the following April. As soon as military fortunes favored, Lincoln under his war powers proclaimed the emancipation of slaves in all unconquered states and districts, and the Thirteenth Amendment in 1865 universalized the decree. America at long last had caught up with the preamble of the Declaration of Independence.

Even prior to his re-election in 1864, Lincoln "with malice toward none" announced a plan to ease the return of the Southern states to their former place in the Union; but before much could be accomplished, his assassination in April, 1865, brought into office Andrew Johnson, who shared his views of reconstruction without his gifts of persuasion. Over Johnson's vetoes the radical Republicans adopted a punitive program. They imposed military rule upon the South, impeached and almost ousted the President, and exacted ratification of the Fourteenth and Fifteenth Amendments before readmitting the last states in 1870. These amendments were designed to make the freedman a full-fledged citizen and voter. Even so, federal bayonets kept Northern-controlled carpet-bag governments in power for several years more.

5. Business and Government

Already the Republicans were changing from a humanitarian party to one of conservative business. The war gave an immense stimulus to economic life, speeding the construction of railways, the exploitation of minerals and other resources, the development of large-scale manufacturing, the accumulation of wealth, and bringing to the fore great captains of industry and finance, who naturally turned for favors to the dominant party. Despite economic depressions after the Panics of 1873 and 1893, this alliance of business and politics

governed the country almost uninterruptedly for the rest of the century, putting successively into office Grant (for eight years), Rutherford B. Hayes, James A. Garfield, Chester A. Arthur (for Garfield's unexpired term), Benjamin Harrison and William McKinley (for two terms).

In the Hayes-Tilden election of 1876, however, the Republicans nearly came to grief, partly because of revelations of widespread graft in Grant's second administration, and partly because of disputed electoral returns from the surviving carpetbag states. A special commission, created by Congress, decided for Hayes by a strictly partisan vote. The Democrats actually won eight years later, the voters preferring Grover Cleveland to James G. Blaine, whom they suspected of political corruption. Cleveland, though defeated in 1888, triumphed again in 1892 largely because the Republicans had claimed too much for the beneficence of tariff protection. The Republicans avoided other disasters by harping upon Democratic disloyalty during the Civil War ("waving the bloody shirt") and by catering to the Northern veterans' vote with generous pensions.

Conservative Republicanism met its principal difficulties in Congress, where the Western members, supported usually by Southern Democrats, uneasily resisted capitalistic domination. The Farther West, peopling rapidly after the war, gave a fresh dimension to the nation. Thanks to the attractions of precious minerals, cattle raising and free homesteads, this last frontier yielded steadily to settled communities, and between 1876 and 1896 eight additional states entered the Union. A new sectionalism emerged in politics, for Western needs and aspirations differed at many points from those of the East. The wage earners, too, feared the growing power of Big Business, but despite mounting numbers they lacked political representation and hence concentrated on trade-union methods, forming the American Federation of Labor in 1881. The two depression periods produced violent strikes and upheavals. Labor, however, prevailed upon Congress to place restraints on immigration in order to discourage competition by underpaid workers, especially from Southern and Eastern Europe.

Legislative struggles nearly always pivoted on issues affecting the new industrial order. The problem of greenback inflation, arising from the war, was finally settled to Eastern satisfaction by the Resumption Act of 1875. The drive for higher and yet higher protection succeeded with occasional reverses until the Dingley Tariff in 1897 set a record. Congress under Western pressure took ineffective steps in 1887 and 1890 to regulate railways and business combinations, and it made some early concessions also to the Western de-

mand for free silver. During the Panic of 1893, however, Cleveland induced Congress to stop the inflation; and after the silverites, capturing the Democratic convention in 1896, failed to elect their nominee, William Jennings Bryan, the Republicans reduced silver to a minor coin and committed the country to the gold standard.

Foreign relations reflected similar tendencies, for the expanding industrial system demanded new markets, openings for investment and sources of raw materials. Cleveland withstood imperialistic sentiment, and in 1898 the McKinley administration intervened in the Cuban insurrection under the whip of popular anger at Spanish methods of repression and the explosion of the battleship *Maine* in Havana Harbor. Spain was quickly routed not only in the West Indies but also in her possessions off Asia. Though the "splendid little war" was prompted less by Wall Street than by a superheated sensational press, it bore fruit in the annexation of Puerto Rico, the Philippines and Guam, and brought businessmen further advantages through the quasi protectorate imposed on Cuba (later extended to other Caribbean countries). About the same time Hawaii and American Samoa were acquired, and Secretary of State John Hay's "open door" policy promised a growing trade with China. Theodore Roosevelt, raised to the presidency by McKinley's assassination in September, 1901, further advanced the cause by abetting a revolution against Colombia, thereby assuring the construction of the Panama Canal and much shorter distances within the colonial empire.

In domestic politics, however, Roosevelt aligned himself with the rising sentiment against business-dominated government, preaching with gusto the doctrine of the "square deal," and in his seven years breaking ground for later and more substantial advances. Despite party reactionaries he put teeth into the enforcement of the Antitrust Act of 1890, bullied Congress into tightening control over railroads and industrial monopolies, and initiated measures for conserving the nation's natural resources. William Howard Taft, his choice as successor, quietly pursued similar policies; but Taft's endorsement of the steep Payne-Aldrich Tariff together with other missteps so embittered the reformers that, failing to prevent his renomination in 1912, they organized the Progressive party to run their idol "Teddy" again. The Democrats, facing a divided opposition, elected their candidate, Woodrow Wilson.

Superbly endowed intellectually, and gifted with Jefferson's power to express democratic aspirations, Wilson proceeded with magisterial authority to climax the earlier efforts at reform. The Underwood Tariff enacted the lowest rates since the

Civil War; the Federal Reserve Act superseded an outworn national banking system; and the Clayton Act created the Federal Trade Commission to stop "unfair methods of competition." Two other measures, launched by popular demand during World War I, involved changes in the Constitution. The Eighteenth Amendment in 1920 enacted national prohibition, which ran its stormy course in thirteen years and required the Twenty-first for its undoing. The Nineteenth Amendment (1920) extended to all women the suffrage which in some states they already possessed.

6. World War and After

With America a neutral in 1914 when the European struggle began, the administration's chief energies turned to the protection of maritime rights. Wilson and his countrymen, hating war and traditionally isolationist, only gradually perceived the threat to national security if a militaristic Germany should supplant Britain as mistress of the Atlantic; but Berlin's revival of ruthless submarine operations a few months after Wilson's second election clarified men's minds. Congress, stirred by his appeal that "The world must be made safe for democracy," declared war on April 6, 1917. The government, racing against time, swiftly put the nation on a battle footing, enacting universal conscription, taking over the railways, and regimenting industry, labor and agriculture. It was the country's introduction to total war. In the summer of 1918 Yankee troops under General John J. Pershing helped repulse a great German drive on the Marne and in September shared in the mighty Meuse-Argonne counteroffensive, which ended the struggle on November 11.

At the Paris Peace Conference, Wilson fought stubbornly for the democratic settlement he had earlier outlined under Fourteen Points, but gained principally his proposal of a League of Nations, which he saw as a sort of continuing peace conference. At home the Republican-controlled Senate, whipping up isolationist sentiment, completed his rout, for when Wilson spurned efforts to amend the treaty, that body under the two-thirds requirement rejected it by a minority vote. The tide was turning from wartime idealism to what Warren G. Harding, overwhelmingly elected by the Republicans in 1920, called "normalcy." Disclosures of corruption in high government circles hastened Harding's death, elevating Calvin Coolidge, who renewed his presidency by election a year later and was followed in 1929 by Herbert Hoover. All three, while keeping out of the League, nevertheless co-operated with some of its minor activities and, on their own, concluded a number of collective treaties for temporary naval disarmament and the outlawry of war.

These part-way steps were offset, however, by an upsurge of economic nationalism: a skyward trend of protective duties, a relaxing of controls over giant corporations, and a quota limitation on European immigration. "Rugged individualism" produced the dizziest prosperity the country had ever known, only to collapse in 1929 into the worst depression ever known. Hoover, striving vainly to repair the damage, met abject defeat in 1932 at the hands of the socially minded Franklin D. Roosevelt, who pledged a "new deal" by the Democrats. Under Roosevelt's thrilling leadership Congress, casting precedent to the winds, voted billions for relief, "primed the pump" of business and agriculture to hasten recovery, and inaugurated long-range reforms to increase foreign trade through reciprocal tariff reductions, reorganize banking practices, safeguard trade-union activities, guarantee minimum wages, destroy electrical holding companies, and provide for social insurance and a government-planned development of the Tennessee Valley.

7. World War Again

Toward Latin America Franklin Roosevelt adopted the "good neighbor" policy, relinquishing the Caribbean protectorates and transforming the Monroe Doctrine into a mutual nonaggression pact. As further evidence of the retreat from imperialism, Congress made provision for Philippine freedom in 1946. Relations with other parts of the world, however, posed increasing problems. As the Axis dictators and their Oriental partner, Japan, began overrunning weaker peoples, Congress under isolationist influences directed Roosevelt, against his wish, to embargo munition sales to both victim and assailant; but public opinion forced a lifting of the ban after England and France in September, 1939, took up arms against Nazi aggression. Hitler's subjugation of France the following June emboldened Roosevelt to more active steps, for crippled England now alone defended the Atlantic from totalitarian domination. Congress at his behest voted vast sums for rearmament and adopted peacetime conscription, and Roosevelt, without consulting Congress, gave England fifty destroyers in exchange for a string of naval bases off North America.

Isolationists, mostly Republicans, denounced Roosevelt's "warmongering," while he, still clinging to measures "short of war," stressed insistently the gathering dangers to the American way of life—to freedom of speech, freedom of worship, freedom from want and freedom from fear. The people responded by choosing him in 1940 as their first third-term President. In March, 1941, he secured adoption of the lend-lease plan and soon began using the navy to safeguard the supplies en route.

Before matters reached a crisis, the Japanese war lords, irked by America's stiffening attitude toward their own conquests and gambling upon an Axis victory in Europe, treacherously attacked Pearl Harbor on December 7, clearing the way for the seizure of Guam, the Philippines and two of the Aleutians, as well as many Dutch and British holdings. Within four days Germany and Italy declared war against the United States.

America quickly girded herself for the mightiest struggle in history. Enlarging upon Wilson's wartime methods, the government completely reorganized the national economy for an unparalleled output of arms and food. By summer, sea, land and air forces were attacking the enemy all over the globe. In May, 1943, after bitter fighting, Anglo-American armies expelled the Axis from North Africa, then invaded southern Italy and forced the government's submission in September, though the Nazis there kept up the fight. Landing in Normandy in June, 1944, the Allies under Dwight D. Eisenhower's supreme command battered their way through France and across the Rhine, while the Russians pounded the Nazis from the east. On May 7, 1945, Germany unconditionally surrendered. The Pacific war was no less desperately contested; but the Allies, based on Australia, slowly won control of the sea and, pressing onward from island to island, hastened Japan's unconditional surrender on August 14, 1945, by loosing the atomic bomb and by Soviet Russia's last-minute entry into the conflict.

World War II was at an end, but what would be the nature of the peace? The Atlantic Charter, signed in August, 1941, by Roosevelt and Churchill and later agreed to by all the Allies, pledged them against "aggrandizement, territorial or other," but subsequent conferences by the major powers—at Cairo, Teheran, Yalta, Potsdam and elsewhere—foreshadowed a different outcome. Russia in particular demanded substantial territorial advantages. In July, 1946, the Allies gathered at Paris to draw up terms for Italy and the Axis satellites: Rumania, Bulgaria, Hungary and Finland. Germany and Japan, under armed occupation, were reserved for later handling.

Without waiting for final military victory fifty countries, at Roosevelt's urging and with bipartisan support in America, had set up a successor to the League: the peacetime United Nations. Roosevelt, elected a fourth time in 1944, died suddenly on April 12, 1945, several weeks too soon to assist in framing the charter at San Francisco; but his achievements in peace and war had already earned him a niche alongside America's greatest Presidents: Washington, Jefferson, Jackson, Lincoln and Wilson.

HOW A PRESIDENT IS ELECTED

Selection of Delegates

NOT A WORD APPEARS IN THE CONSTITUTION about nominating a candidate for President, but hardly has one Chief Executive been inaugurated before the country begins its great national guessing game—who are likely to be the candidates by the time of the next presidential election?

Actually the eventual choice of a candidate involves ponderous machinery. First, at full dress meetings some months before, the national committees decide the time and place of the conventions. Before the conventions meet each party selects delegates from every state and territory.

The Democrats allow each state twice as many delegates as the state has senators and representatives; the party has allowed four additional delegates from each state that went Democratic in the election of 1944. The Democrats also allow six delegates each to Puerto Rico, the District of Columbia, Alaska, Hawaii and the Canal Zone and two to the Virgin Islands.

The Republicans allot each state four delegates-at-large and two each for each Representative-at-large, as well as three additional delegates if the state went Republican in the previous presidential or senatorial election. In addition, each congressional district within the state that cast 1,000 Republican votes at the last election is permitted a delegate, with an additional delegate if that district cast 10,000 votes. The Republicans further allot two delegates to Puerto Rico and three to the District of Columbia; Alaska and Hawaii also get three delegates plus two if the territorial delegate to Congress is Republican.

Each party provides for the selection of an equal number of alternates to serve in the absence of regular delegates. Delegates are chosen differently in different states, mostly by party primary but in some cases by party conventions.

The Conventions

At each convention a temporary chairman is chosen, usually to deliver the party's keynote speech. After a credentials committee seats the various delegates, a permanent chairman is elected. The convention then votes on a platform, drawn up by the platform committee.

By the third or fourth day, presidential nominations begin. The chairman calls the roll of states alphabetically. A state may place a candidate in nomination or yield to another state.

Voting, again alphabetically by voice

vote, begins after all nominations have been made and seconded. A simple majority is required in each party, although this may require many ballots. Then, the vice presidential candidate is selected; he must come from a different state, since electors must vote for a President or a Vice President (either one) not a resident of his own state. A President and Vice President must not come from one state.

The Electoral College

The next step in the process is the nomination of electors in each state, according to its laws. These electors must not be federal office holders. In the November election, the voters cast their votes for electors, not for President. In some states, the ballots include only the names of the presidential and vice presidential candidates; in others, they include only names of the electors. Nowadays, it is practically impossible for electors to be split between parties. It last occurred in West Virginia in 1916. On several occasions, the candidate with the largest popular vote nationally failed to obtain the necessary majority of the electoral vote.

Each state has as many electors as it has United States Senators and members of the House of Representatives. There are 96 Senators and 435 Representatives, a total of 531 electoral votes, of which 266 are needed to win.

On the first Monday after the second Wednesday in December, the electors cast their votes in their respective state capitols. Constitutionally they may vote for someone other than the party candidate but practically they cannot since they are pledged to one party and its candidate on the ballot. Should the presidential or vice presidential candidate die during the interval between the November popular vote and the December meetings, new choices may be made to fill the tickets by the national committees or by conventions called by them. The votes of the electors, certified by the states, are sent to Congress where the President of the Senate opens the certificates and has them counted in the presence of both Houses in January. The new President is inaugurated at noon on January 20.

Should no candidate receive a majority of the electoral vote for President, the House of Representatives chooses a President from among the three highest candidates, voting, not as individuals, but as states, with a majority (now 25) needed to elect. Should no vice presidential candidate obtain the majority, the Senate, voting as individuals, chooses from the highest two.

U. S. National Conventions Since 1856

Date	Party	Where held	Nominated	Vote
June 17, 1856	R	Philadelphia	John C. Frémont	520
June 2, 1856	D	Cincinnati	James Buchanan	296
May 16, 1860	R	Chicago	Abraham Lincoln	364
April 23, 1860	D	Charleston & Baltimore	S. A. Douglas	181
June 7, 1864	R	Baltimore	Abraham Lincoln	Unanimous
Aug. 29, 1864	D	Chicago	Geo. B. McClellan	202½
May 20, 1868	R	Chicago	U. S. Grant	Unanimous
July 4, 1868	D	New York City	Horatio Seymour	Unanimous
June 5, 1872	R	Philadelphia	U. S. Grant	Unanimous
June 9, 1872	D	Baltimore	Horace Greeley	688
June 14, 1876	R	Cincinnati	R. B. Hayes	384
June 28, 1876	D	St. Louis	S. J. Tilden	508
June 2, 1880	R	Chicago	J. A. Garfield	399
June 23, 1880	D	Cincinnati	W. S. Hancock	705
June 3, 1884	R	Chicago	J. G. Blaine	541
July 11, 1884	D	Chicago	Grover Cleveland	683
June 19, 1888	R	Chicago	Benjamin Harrison	544
June 6, 1888	D	St. Louis	Grover Cleveland	By acclamation
June 7, 1892	R	Minneapolis	Benjamin Harrison	535⅓
June 21, 1892	D	Chicago	Grover Cleveland	617½
June 16, 1896	R	St. Louis	William McKinley	661½
July 7, 1896	D	Chicago	William J. Bryan	500
June 19, 1900	R	Philadelphia	William McKinley	Unanimous
July 4, 1900	D	Kansas City	William J. Bryan	By acclamation
June 21, 1904	R	Chicago	Theodore Roosevelt	Unanimous
July 6, 1904	D	St. Louis	Alton B. Parker	678
June 16, 1908	R	Chicago	William H. Taft	702
July 7, 1908	D	Denver	William J. Bryan	892½
June 18, 1912	R	Chicago	William H. Taft	561
June 25, 1912	D	Baltimore	Woodrow Wilson	990
June 7, 1916	R	Chicago	Charles E. Hughes	949½
June 14, 1916	R	St. Louis	Woodrow Wilson	By acclamation
June 8, 1920	R	Chicago	Warren G. Harding	692⅓
June 28, 1920	D	San Francisco	James M. Cox	732½
June 10, 1924	R	Cleveland	Calvin Coolidge	1,065
June 24, 1924*	D	New York City	John W. Davis	839†
June 12, 1928	R	Kansas City	Herbert Hoover	837
June 26, 1928	D	Houston	Alfred E. Smith	849½
June 14, 1932	R	Chicago	Herbert Hoover	1,126½
June 27, 1932	D	Chicago	F. D. Roosevelt	945
June 9, 1936	R	Cleveland	Alfred M. Landon	984
June 23, 1936	D	Philadelphia	F. D. Roosevelt	By acclamation
June 24, 1940	R	Philadelphia	Wendell L. Willkie	Unanimous
July 15, 1940	D	Chicago	F. D. Roosevelt	Unanimous
June 26, 1944	R	Chicago	Thomas E. Dewey	1,056
July 19, 1944	D	Chicago	F. D. Roosevelt	1,086-90
June 21, 1948	R	Philadelphia	Thomas E. Dewey	1,094-0
July 12, 1948	D	Philadelphia	Harry S. Truman	947½-263½
July 17, 1948	(†)	Birmingham	J. Strom Thurmond	By acclamation
July 22, 1948	P	Philadelphia	Henry A. Wallace	By acclamation

* In session until July 10, 1924. † Nominated on 103d ballot. ‡ States' Rights delegates from 13 Southern states.

Earlier Conventions

For most of the elections before 1832, presidential candidates were nominated by a Congressional caucus. The first national nominating convention in American history was held by the Antimasonic party on Sept. 26, 1831, in Baltimore. On Dec. 12 of the same year, the National Republican party (which was to become the Whig party about 1834) held a national convention in Baltimore and nominated Clay and Sergeant. On May 21, 1832, the Democratic party held a national convention in Baltimore to nomi-

nate a candidate for Vice President to run with Jackson. Van Buren was the nominee.

Up to the disappearance of the Whig party after its bad defeat in 1852, Whig conventions were held in Harrisburg, Pa., in 1839, in Baltimore in 1844 and 1852, and in Philadelphia in 1848; none was held in 1836; instead regional meetings placed three anti-Jacksonian candidates on the ballot.

Other Democratic conventions were held in Baltimore in 1835, 1840, 1844, 1848 and 1852.

Presidential Elections, 1789 to 1948

The Constitution does not provide for the popular election of either the President or Vice President. It merely states that they shall be chosen by electors who shall be chosen in a manner prescribed by the state legislatures. No set of popular vote returns is complete or entirely significant until 1872, because that was the first election in which all electors were chosen by popular vote. By referring to the returns in 1876 and 1898, it can be seen that the candidate with the greatest popular vote is not necessarily elected.

Year	Presidential candidates	Party	Electoral vote	Year	Presidential candidates	Party	Electoral vote
1789 ^{1,2}	George Washington	(no party)	69	1796 ¹	John Adams	Federalist	71
	John Adams	(no party)	34		Thomas Jefferson	Dem.-Rep.	68
	Scattering	(no party)	35		Thomas Pinckney	Federalist	59
	Votes not cast		8		Aaron Burr	Dem.-Rep.	30
1792 ¹	George Washington	Federalist	132	1800 ^{1,3}	Scattering		48
	John Adams	Federalist	77		Thomas Jefferson	Dem.-Rep.	73
	George Clinton	Anti-Federalist	50		Aaron Burr	Dem.-Rep.	73
	Thomas Jefferson	Anti-Federalist	4		John Adams	Federalist	65
	Aaron Burr	Anti-Federalist	1		Charles C. Pinckney	Federalist	64
	Votes not cast		6		John Jay	Federalist	1

¹ For the original method of electing the President and the Vice President, see Article II, Section 1, of the Constitution. ² Only 10 states participated in the election. The New York legislature chose no electors, and North Carolina and Rhode Island had not yet ratified the Constitution. ³ As Jefferson and Burr were tied, the House of Representatives chose the President. In a vote by states, 10 votes were cast for Jefferson and 4 for Burr. Two votes were not cast.

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1804 ¹	Thomas Jefferson	Dem.-Rep.	162	George Clinton	Dem.-Rep.	162
	Charles C. Pinckney	Federalist	14	Rufus King	Federalist	14
1808	James Madison	Dem.-Rep.	122	George Clinton	Dem.-Rep.	113
	Charles C. Pinckney	Federalist	47	Rufus King	Federalist	47
	George Clinton	Dem.-Rep.	6	John Langdon	Ind. (no party)	9
	Votes not cast		1	James Madison	Dem.-Rep.	3
1812	James Madison	Dem.-Rep.	128	James Monroe	Dem.-Rep.	3
	De Witt Clinton	Federalist	89	Votes not cast		1
	Votes not cast		1	Elbridge Gerry	Dem.-Rep.	131
				Jared Ingersoll	Federalist	86
1816	James Monroe	Dem.-Rep.	183	Votes not cast		1
	Rufus King	Federalist	34	Daniel D. Tompkins	Dem.-Rep.	183
	Votes not cast		4	John E. Howard	Federalist	22
				James Ross	Ind. (no party)	5
1820	James Monroe	Dem.-Rep.	231	John Marshall	Federalist	4
	John Quincy Adams	Ind. (no party)	1	Robert G. Harper	Ind. (no party)	3
	Votes not cast		3	Votes not cast		4
				Daniel D. Tompkins	Dem.-Rep.	218
				Richard Stockton	Ind. (no party)	8
				Daniel Rodney	Ind. (no party)	4
				Richard Rush	Ind. (no party)	1
1824 ²	John Quincy Adams	(no party)	84	Robert G. Harper	Ind. (no party)	1
	Andrew Jackson	(no party)	99	Votes not cast		3
	William H. Crawford	(no party)	41	John C. Calhoun	(no party)	182
	Henry Clay	(no party)	37	Nathan Sanford	(no party)	30
				Nathaniel Macon	(no party)	24
				Andrew Jackson	(no party)	13
1828				Martin Van Buren	(no party)	9
	Andrew Jackson	Democratic	178	Henry Clay	(no party)	2
	John Quincy Adams	Natl. Rep.	83	Votes not cast		1
				John C. Calhoun	Democratic	171
				Richard Rush	Natl. Rep.	83
1832				William Smith	Democratic	7
	Andrew Jackson	Democratic	219	Martin Van Buren	Democratic	189
	Henry Clay	Natl. Rep.	49	John Sergeant	Natl. Rep.	49
	John Floyd	Ind. (no party)	11	Henry Lee	Ind. (no party)	11
	William Wirt ³	Antimasonic	7	Amos Ellmaker	Antimasonic	7
	Votes not cast		2	William Wilkins	Ind. (no party)	30
1836				Votes not cast		2
	Martin Van Buren	Democratic	170	Richard M. Johnson ⁴	Democratic	147
	William H. Harrison	Whig	73	Francis Granger	Whig	77
	Hugh L. White	Whig	26	John Tyler	Democratic	47
	Daniel Webster	Whig	14	William Smith	Ind. (no party)	23
	W. P. Mangum	Ind. (no party)	11			

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1840	William H. Harrison ⁶	Whig	234	John Tyler	Whig	234
	Martin Van Buren	Democratic	60	Richard M. Johnson	Democratic	48
				L. W. Tazewell	Ind. (no party)	11
				James K. Polk	Democratic	1
1844	James K. Polk	Democratic	170	George M. Dallas	Democratic	170
	Henry Clay	Whig	105	Theo. Frelinghuysen	Whig	105
1848	Zachary Taylor ⁶	Whig	163	Millard Fillmore	Whig	163
	Lewis Cass	Democratic	127	William O. Butler	Democratic	127
1852	Franklin Pierce	Democratic	254	William R. King	Democratic	254
	Winfield Scott	Whig	42	William A. Graham	Whig	42
1856	James Buchanan	Democratic	174	John C. Breckinridge	Democratic	174
	John C. Frémont	Republican	114	William L. Dayton	Republican	114
	Millard Fillmore	American ⁷	8	A. J. Donelson	American ⁷	8
1860	Abraham Lincoln	Republican	180	Hannibal Hamlin	Republican	180
	John C. Breckinridge	Democratic	72	Joseph Lane	Democratic	72
	John Bell	Const. Union	39	Edward Everett	Const. Union	39
	Stephen A. Douglas	Democratic	12	H. V. Johnson	Democratic	12
1864	Abraham Lincoln ⁸	Republican	212	Andrew Johnson	Republican	212
	George B. McClellan	Democratic	21	G. H. Pendleton	Democratic	21
1868	Ulysses S. Grant	Republican	214	Schuyler Colfax	Republican	214
	Horatio Seymour	Democratic	80	Francis P. Blair, Jr.	Democratic	80
	Votes not counted ⁹		23	Votes not counted ⁹		23

¹ The first election in which the electors voted for President and Vice President on separate ballots. (See Amendment XII to the Constitution.) ² As no candidate had an electoral-vote majority, the House of Representatives chose the President from the first three. In a vote by states, 13 votes were cast for Adams, 7 for Jackson, and 4 for Crawford. ³ The Antimasonic party, on Sept. 26, 1831, was the first party to hold a nominating convention to choose candidates for President and Vice President. ⁴ As Johnson did not have an electoral-vote majority, the Senate chose him 33-14 over Frémont, the others being legally out of the race. ⁵ Harrison died Apr. 4, 1841, and Tyler succeeded him Apr. 6. ⁶ Taylor died July 9, 1850, and Fillmore succeeded him July 10. ⁷ Also known as the Know-Nothing party. ⁸ Lincoln died Apr. 15, 1865, and Johnson succeeded him the same day. ⁹ 23 Southern electoral votes were excluded.

Year	Presidential candidates	Party	Electoral vote	Popular vote ¹	Vice-presidential candidates and party
1872	Ulysses S. Grant	Republican	286	3,597,132	Henry Wilson—R
	Horace Greeley	Dem., Liberal Rep.	(²)	2,834,125	B. Gratz Brown—D, LR—(47)
	Thomas A. Hendricks	Democratic	42		Scattering—(19)
	B. Gratz Brown	Dem., Liberal Rep.	18		Votes not counted—(14)
	Charles J. Jenkins	Democratic	2		
	David Davis	Democratic	1		
	Votes not counted		17		
1876 ³	Rutherford B. Hayes	Republican	185	4,033,768	William A. Wheeler—R
	Samuel J. Tilden	Democratic	184	4,285,992	Thomas A. Hendricks—D
	Peter Cooper	Greenback	0	81,737	Samuel F. Cary—G
1880	James A. Garfield ⁴	Republican	214	4,449,053	Chester A. Arthur—R
	Winfield S. Hancock	Democratic	155	4,442,035	William H. English—D
	James B. Weaver	Greenback	0	308,578	B. J. Chambers—G
1884	Grover Cleveland	Democratic	219	4,911,017	Thomas A. Hendricks—D
	James G. Blaine	Republican	182	4,848,334	John A. Logan—R
	Benjamin F. Butler	Greenback	0	175,370	A. M. West—G
	John P. St. John	Prohibition	0	150,369	William Daniel—P
1888	Benjamin Harrison	Republican	233	5,440,216	Levi P. Morton—R
	Grover Cleveland	Democratic	168	5,538,233	A. G. Thurman—D
	Clinton B. Fisk	Prohibition	0	249,506	John A. Brooks—P
	Alson J. Streeter	Union Labor	0	146,935	Charles E. Cunningham—UL
1892	Grover Cleveland	Democratic	277	5,556,918	Adlai E. Stevenson—D
	Benjamin Harrison	Republican	145	5,176,108	Whitelaw Reid—R
	James B. Weaver	People's ⁵	22	1,041,028	James G. Field—Peo
	John Bidwell	Prohibition	0	264,133	James B. Cranfill—P
1896	William McKinley	Republican	271	7,035,638	Garret A. Hobart—R
	William J. Bryan	Dem., People's ⁵	176	6,467,946	Arthur Sewall—D—(149)
	John M. Palmer	Natl. Dem.	0	133,148	Thomas E. Watson—Peo—(27)
	Joshua Levering	Prohibition	0	132,007	Simon B. Buckner—ND
					Hale Johnson—P

Year	Presidential candidates	Party	Electoral vote	Popular vote ¹	Vice-presidential candidates and party
1900	William McKinley ^a	Republican	292	7,219,530	Theodore Roosevelt—R
	William J. Bryan	Dem., People's ^b	155	6,358,071	Adlai E. Stevenson—D, Peo
	John G. Woolley	Prohibition	0	208,914	Henry B. Metcalf—P
	Eugene V. Debs	Social Democratic	0	94,768	Job Harriman—SD
1904	Theodore Roosevelt	Republican	336	7,528,834	Charles W. Fairbanks—R
	Alton B. Parker	Democratic	140	5,084,491	Henry G. Davis—D
	Eugene V. Debs	Socialist	0	402,400	Benjamin Hanford—S
	Silas C. Swallow	Prohibition	0	258,536	George W. Carroll—P
	Thomas E. Watson	People's	0	117,183	Thomas H. Tibbles—Peo
1908	William H. Taft	Republican	321	7,679,006	James S. Sherman—R
	William J. Bryan	Democratic	162	6,409,106	John W. Kern—D
	Eugene V. Debs	Socialist	0	420,820	Benjamin Hanford—S
	Eugene W. Chafin	Prohibition	0	253,840	Aaron S. Watkins—P
	Thomas L. Hisgen	Independence	0	82,872	John T. Graves—I
1912	Woodrow Wilson	Democratic	435	6,236,214	Thomas R. Marshall—D
	Theodore Roosevelt	Progressive	88	4,126,020	Hiram Johnson—Prog
	William H. Taft	Republican	8	3,483,922	Nicholas M. Butler—R ⁷
	Eugene V. Debs	Socialist	0	897,011	Emil Seidel—S
	Eugene W. Chafin	Prohibition	0	206,275	Aaron S. Watkins—P
1916	Woodrow Wilson	Democratic	277	9,129,606	Thomas R. Marshall—D
	Charles E. Hughes	Republican	254	8,538,221	Charles W. Fairbanks—R
	A. L. Benson	Socialist	0	585,113	G. R. Kirkpatrick—S
	J. Frank Hanly	Prohibition	0	220,506	Ira Landrith—P
1920	Warren G. Harding ^a	Republican	404	16,152,200	Calvin Coolidge—R
	James M. Cox	Democratic	127	9,147,353	Franklin D. Roosevelt—D
	Eugene V. Debs	Socialist	0	917,799	Seymour Stedman—S
	P. P. Christensen	Farmer-Labor	0	265,411	Max S. Hayes—FL
	Aaron S. Watkins	Prohibition	0	189,408	D. Leigh Colvin—P
1924	Calvin Coolidge	Republican	382	15,725,016	Charles G. Dawes—R
	John W. Davis	Democratic	136	8,385,586	Charles W. Bryan—D
	Robert M. La Follette	Progressive, Socialist	13	4,822,856	Burton K. Wheeler—Prog S
1928	Herbert Hoover	Republican	444	21,392,190	Charles Curtis—R
	Alfred E. Smith	Democratic	87	15,016,443	Joseph T. Robinson—D
	Norman Thomas	Socialist	0	267,420	James H. Maurer—S
1932	Franklin D. Roosevelt	Democratic	472	22,821,857	John N. Garner—D
	Herbert Hoover	Republican	59	15,761,841	Charles Curtis—R
	Norman Thomas	Socialist	0	884,781	James H. Maurer—S
	William Z. Foster	Communist	0	102,991	James W. Ford—C
	William D. Upshaw	Prohibition	0	81,859	Frank S. Regan—P
1936	Franklin D. Roosevelt	Democratic	523	27,751,597	John N. Garner—D
	Alfred M. Landon	Republican	8	16,679,583	Frank Knox—R
	William Lemke	Union	0	882,479	Thomas C. O'Brien—U
	Norman Thomas	Socialist	0	187,720	George Nelson—S
	Eari Browder	Communist	0	80,159	James W. Ford—C
1940	Franklin D. Roosevelt	Democratic	449	27,244,160	Henry A. Wallace—D
	Wendell L. Willkie	Republican	82	22,305,198	Charles L. McNary—R
	Norman Thomas	Socialist	0	100,264	Maynard C. Krueger—S
1944	Franklin D. Roosevelt ^a	Democratic	432	25,602,504	Harry S. Truman—D
	Thomas E. Dewey	Republican	99	22,006,285	John W. Bricker—R
	Norman Thomas	Socialist	0	80,426	Darlington Hoopes—S
1948	Harry S. Truman	Democratic	303	24,105,695	Alben W. Barkley—D
	Thomas E. Dewey	Republican	189	21,969,170	Earl Warren—R
	J. Strom Thurmond	States' Rights Dem.	39	1,169,021	Flelding L. Wright—SR
	Henry A. Wallace	Progressive	0	1,156,103	Glen Taylor—Prog
	Norman Thomas	Socialist	0	139,009	Tucker P. Smith—S
	Claude A. Watson	Prohibition	0	103,216	Dale Learn—Proh

¹ For those candidates receiving over 75,000 votes. ² Greeley died Nov. 29, 1872, before his 66 electors voted. In the electoral balloting for President, 63 of Greeley's votes were scattered among Hendricks, Brown, Jenkins and Davis; the other 3, included in "Votes not counted," were cast for Greeley by electors from Georgia. This was the first election in which every state chose its electors by popular vote. ³ After the voting of the electoral college, Tilden had 184 undisputed votes, and Hayes 163. However, 22 other votes were in doubt, because two sets of electoral ballots were received from South Carolina, Louisiana, Florida and Oregon. For each of the three Southern states, one set was completely Democratic, the other completely Republican. For Oregon, one set gave all 3 of the state's votes to Hayes, the other gave one of the votes to Tilden. To settle the dispute, Congress created an Electoral Commission on Jan. 29, 1877. This Commission, consisting of 5 Supreme Court justices, 5 senators and 5 representatives (3 Republicans and 7 Democrats), gave the 22 votes in question to Hayes. ⁴ Garfield died Sept. 19, 1881, and Arthur succeeded him Sept. 20. ⁵ The members of the People's party were known as Populists. ⁶ McKinley died Sept. 14, 1901, and Roosevelt succeeded him the same day. ⁷ James S. Sherman, Republican candidate for Vice President, died Oct. 30, 1912, and the Republican electoral votes were cast for Butler. ⁸ Harding died Aug. 2, 1923, and Coolidge succeeded him Aug. 3. ⁹ Roosevelt died Apr. 12, 1945, and Truman succeeded him the same day.

Presidential Election of 1928

Source: Secretaries of State of the several states from records filed with the House of Representatives.

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Republican—Herbert Hoover, California; Charles Curtis, Kansas.

Democratic—Alfred E. Smith, New York; Joseph T. Robinson, Arkansas.

Socialist—Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor—Verne L. Reynolds, New York; Jeremiah D. Crowley, New York.

Prohibition—William F. Varney, New York; James A. Edgerton, Virginia.

Workers—William Z. Foster, Illinois; Benjamin Gitlow, New York.

State	Total	Rep.	Dem.	Plur.	Electoral R D	Soc.	Soc. Lab.*	Prohib.	Others†
Alabama.....	248,982	120,725	127,797	7 072 D	3 12	460	.....	.....	.....
Arizona.....	91,254	52,533	38,537	13,996 R	3 ..	.....	.....	.....	184
Arkansas.....	197,693	77,751	119,196	41,445 D	.. 9	429	.....	.....	317
California.....	1,796,656	1,162,323	614,365	547,958 R	13 ..	19,595	.....	.....	373
Colorado.....	392,242	253,872	133,131	120,741 R	6 ..	3,472	.....	.....	1,767
Connecticut.....	553,031	296,614	252,040	44,574 R	7 ..	3,019	622	.....	736
Delaware.....	105,891	68,860	36,643	32,217 R	3 ..	329	.....	.....	59
Florida.....	253,674	144,168	101,764	42,404 R	6 ..	4,036	.....	.....	3,706
Georgia.....	229,159	63,498	129,602	66,104 D	.. 14	124	.....	.....	35,935
Idaho.....	154,230	99,848	53,074	46,774 R	4 ..	1,308	.....	.....	.....
Illinois.....	3,107,489	1,769,141	1,313,817	455,324 R	29 ..	19,138	1,812	.....	3,581
Indiana.....	1,421,314	848,290	562,691	285,599 R	15 ..	3,871	645	5,496	321
Iowa.....	1,009,362	623,818	378,936	244,882 R	13 ..	2,960	230	.....	3,418
Kansas.....	713,200	513,672	193,003	320,669 R	10 ..	6,205	.....	.....	320
Kentucky.....	940,604	558,064	381,070	176,994 R	13 ..	837	340	.....	293
Louisiana.....	215,833	51,160	164,655	113,495 D	.. 10	.....	.....	.....	18
Maine.....	262,171	179,923	81,179	98,744 R	6 ..	1,068	.....	.....	1
Maryland.....	528,348	301,479	223,626	77,853 R	8 ..	1,701	906	.....	636
Massachusetts.....	1,577,827	775,566	792,758	17,192 D	.. 18	6,262	773	.....	2,468
Michigan.....	1,372,082	965,396	396,762	568,634 R	15 ..	3,516	799	2,728	2,881
Minnesota.....	970,976	560,977	396,451	164,526 R	12 ..	6,774	1,921	.....	4,853
Mississippi.....	151,692	27,153	124,539	97,386 D	.. 10	.....	.....	.....	.....
Missouri.....	1,500,721	834,080	662,562	171,518 R	18 ..	3,739	340	.....	.....
Montana.....	194,108	113,300	78,578	34,722 R	4 ..	1,667	.....	.....	563
Nebraska.....	547,138	345,745	197,959	147,786 R	8 ..	3,434	.....	.....	.....
Nevada.....	32,417	18,327	14,090	4,237 R	3 ..	.....	.....	.....	.....
New Hampshire.....	196,747	115,404	80,715	34,689 R	4 ..	455	.....	.....	173
New Jersey.....	1,549,381	926,050	616,517	309,533 R	14 ..	4,897	500	160	1,257
New Mexico.....	118,014	69,645	48,211	21,434 R	3 ..	.....	.....	.....	158
New York.....	4,466,072	2,193,344	2,089,863	103,481 R	45 ..	107,332	4,211	.....	71,322
North Carolina.....	636,070	348,992	287,078	61,914 R	12 ..	.....	.....	.....	.....
North Dakota.....	239,867	131,441	106,648	24,793 R	5 ..	842	.....	.....	936
Ohio.....	2,508,346	1,627,546	864,210	763,336 R	24 ..	8,683	1,515	3,556	2,836
Oklahoma.....	618,427	394,046	219,174	174,872 R	10 ..	3,924	.....	.....	1,283
Oregon.....	319,942	205,341	109,223	96,118 R	5 ..	2,720	1,564	.....	1,094
Pennsylvania.....	3,150,615	2,055,382	1,067,586	987,796 R	38 ..	18,647	380	3,880	4,740
Rhode Island.....	242,784	117,522	118,973	1,451 D	.. 5	.....	416	.....	5,873
South Carolina.....	68,605	3,188	62,700	59,512 D	.. 9	47	.....	.....	2,670
South Dakota.....	261,865	157,603	102,660	54,943 R	5 ..	443	.....	.....	1,159
Tennessee.....	363,473	195,388	167,343	28,045 R	12 ..	631	.....	.....	111
Texas.....	708,999	367,036	341,032	26,004 R	20 ..	722	.....	.....	209
Utah.....	176,604	94,618	80,985	13,633 R	4 ..	954	.....	.....	47
Vermont.....	135,191	90,404	44,440	45,964 R	4 ..	.....	.....	338	9
Virginia.....	305,358	164,609	140,146	24,463 R	12 ..	250	180	.....	173
Washington.....	500,840	335,844	156,772	179,072 R	7 ..	2,615	4,068	.....	1,541
West Virginia.....	642,752	375,551	263,784	111,767 R	8 ..	1,313	.....	1,703	401
Wisconsin.....	1,016,872	544,205	450,259	93,964 R	13 ..	18,213	381	2,245	1,569
Wyoming.....	84,496	52,748	29,299	23,449 R	3 ..	788	.....	.....	1,661
Total.....	36,879,414	21,392,190	15,016,443	6,375,747 R	444 87	267,420	21,603	20,106	161,652

* Labor party in Maryland; Industrial party in Minnesota; Industrialist party in Pennsylvania.

† Breakdown of other votes: Workers 48,770; Anti-Smith 38,541; Farmer-Labor 6,390; void or scattering votes 60,700; blank or defective ballots 7,251.

Presidential Election of 1932

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican—Herbert Hoover, California; Charles Curtis, Kansas.

Socialist—Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor—Verne L. Reynolds, New York; John W. Aiken, Massachusetts.

Prohibition—William D. Upshaw, Georgia; Frank S. Regan, Illinois.

Communist—William Z. Foster, Illinois; James W. Ford, New York.

Liberty—W. H. Harvey, Arkansas; F. B. Hemenway, Washington.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Soc. Lab.*	Prohib.	Others†
Alabama.....	245,034	207,910	34,675	173,235 D	11 ..	2,030	.....	13	406
Arizona.....	118,251	79,264	36,104	43,160 D	3 ..	2,618	.....	.....	265
Arkansas.....	220,552	189,602	28,467	161,135 D	9 ..	1,269	.....	.....	1,224
California.....	2,266,972	1,324,157	847,902	476,255 D	22 ..	63,299	.....	20,637	10,977
Colorado.....	457,696	250,877	189,617	61,260 D	6 ..	13,591	427	1,928	1,256
Connecticut.....	594,207	281,632	288,420	6,788 R	8 ..	20,480	2,287	.....	1,388
Delaware.....	112,901	54,319	57,073	2,754 R	3 ..	1,376	.....	.....	133
Florida.....	276,252	206,307	69,170	137,137 D	7 ..	775	.....	.....	.....
Georgia.....	255,590	234,118	19,863	214,255 D	12 ..	461	.....	1,125	23
Idaho.....	186,520	109,479	71,312	38,167 D	4 ..	526	.....	.....	5,203
Illinois.....	3,407,926	1,982,304	1,432,756	449,548 D	29 ..	67,258	3,638	6,388	15,582
Indiana.....	1,576,927	862,054	677,184	184,870 D	14 ..	21,388	2,070	10,399	3,832
Iowa.....	1,036,687	598,019	414,433	183,586 D	11 ..	20,467	.....	2,111	1,657
Kansas.....	791,978	424,204	349,498	74,706 D	9 ..	18,276	.....	.....	.....
Kentucky.....	983,063	580,574	394,716	185,858 D	11 ..	3,853	1,396	2,252	272
Louisiana.....	268,804	249,418	18,853	230,565 D	10 ..	.....	.....	.....	533
Maine.....	298,444	128,907	166,631	37,724 R	5 ..	2,489	255	.....	162
Maryland.....	511,054	314,314	184,184	130,130 D	8 ..	10,489	1,036	.....	1,031
Massachusetts.....	1,580,114	800,148	736,959	63,189 D	17 ..	34,305	2,668	1,142	4,892
Michigan.....	1,664,628	871,700	739,894	131,806 D	19 ..	39,205	1,401	2,893	9,535
Minnesota.....	1,002,843	600,806	363,959	236,847 D	11 ..	25,476	.....	.....	12,602
Mississippi.....	146,034	140,168	5,180	134,988 D	9 ..	686	.....	.....	.....
Missouri.....	1,609,894	1,025,406	564,713	460,693 D	15 ..	16,374	404	2,429	568
Montana.....	216,479	127,286	78,078	49,208 D	4 ..	7,891	.....	.....	3,224
Nebraska.....	570,135	359,082	201,177	157,905 D	7 ..	9,876	.....	.....	.....
Nevada.....	41,430	28,756	12,674	16,082 D	3 ..	.....	.....	.....	.....
New Hampshire.....	205,520	100,680	103,629	2,949 R	4 ..	947	.....	.....	264
New Jersey.....	1,630,063	806,630	775,684	30,946 D	16 ..	42,998	1,062	774	2,915
New Mexico.....	151,606	95,089	54,217	40,872 D	3 ..	1,776	.....	.....	524
New York.....	4,753,698	2,534,959	1,937,963	596,996 D	47 ..	177,397	10,339	.....	93,040
North Carolina.....	711,501	497,566	208,344	289,222 D	13 ..	5,591	.....	.....	.....
North Dakota.....	256,290	178,350	71,772	106,578 D	4 ..	3,521	.....	.....	2,647
Ohio.....	2,610,088	1,301,695	1,227,679	74,016 D	26 ..	64,094	1,968	7,421	7,231
Oklahoma.....	704,633	516,468	188,165	328,303 D	11 ..	.....	.....	.....	.....
Oregon.....	368,751	213,871	136,019	77,852 D	5 ..	15,450	1,730	.....	1,681
Pennsylvania.....	2,859,002	1,295,948	1,453,540	157,592 R	36 ..	91,119	659	11,319	6,417
Rhode Island.....	266,170	146,604	115,266	31,338 D	4 ..	3,138	433	183	546
South Carolina.....	104,407	102,347	1,978	100,469 D	8 ..	82	.....	.....	.....
South Dakota.....	288,438	183,515	99,212	84,303 D	4 ..	1,551	.....	463	3,697
Tennessee.....	390,638	259,817	126,806	133,011 D	11 ..	1,786	.....	1,995	234
Texas.....	863,426	760,348	97,959	662,389 D	23 ..	4,450	.....	.....	669
Utah.....	206,579	116,750	84,795	31,955 D	4 ..	4,087	.....	.....	947
Vermont.....	136,980	56,266	78,984	22,718 R	3 ..	1,533	.....	.....	197
Virginia.....	297,942	203,979	89,637	114,342 D	11 ..	2,382	.....	1,843	101
Washington.....	614,814	353,260	208,645	144,615 D	8 ..	17,080	1,009	1,540	33,280
West Virginia.....	743,774	405,124	330,731	74,393 D	8 ..	5,133	.....	2,342	444
Wisconsin.....	1,114,815	707,410	347,741	359,669 D	12 ..	53,379	494	2,672	3,119
Wyoming.....	96,962	54,370	39,583	14,787 D	3 ..	2,829	.....	.....	180
Totals.....	39,816,522	22,821,857	15,761,841	7,060,016 D	472 59	884,781	33,276	81,869	232,898

* Industrialist party in Pennsylvania.

† Breakdown of other votes: Communist 102,991; Liberty 53,425; Farmer-Labor 7,309; National 1,645; Industrialist (Minn.) 770; Jobless 725; Independent 533; Jacksonian 104; void or scattering 65,396.

Presidential Election of 1936

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican—Alfred M. Landon, Kansas; Frank Knox, Illinois.

Socialist—Norman Thomas, New York; George Nelson, Wisconsin.

Prohibition—D. Leigh Colvin, New York; Claude A. Watson, California.

Communist—Earl Browder, Kansas; James W. Ford, New York.

Union—William Lemke, North Dakota; Thomas C. O'Brien, Massachusetts.

Socialist Labor—John W. Aiken, Massachusetts; Emil F. Teichert, New York.

State	Total	Dem.	Rep.	Plur.	Electoral		D	R	Soc.	Prohib.	Comm.	Others*
Alabama.....	275,744	238,196	35,358	202,838	D	11	..	..	242	719	678	551
Arizona.....	124,163	86,722	33,433	53,289	D	3	..	..	317	384	....	3,307
Arkansas.....	179,423	146,765	32,039	114,726	D	9	..	..	446	.....	169	4
California.....	2,638,882	1,766,836	836,431	930,405	D	22	..	..	11,331	12,917	10,877	490
Colorado.....	488,676	295,021	181,267	113,754	D	6	..	..	1,593	.....	497	10,298
Connecticut.....	690,783	382,189	278,685	103,504	D	8	..	..	5,683	.....	1,193	23,033
Delaware.....	127,603	69,702	54,014	15,688	D	3	..	..	172	.....	51	3,664
Florida.....	327,365	249,117	78,248	170,869	D	7	..	..	.....	.....	.....	.....
Georgia.....	293,178	255,364	36,942	218,422	D	12	..	..	68	663	.....	141
Idaho.....	199,623	125,683	66,256	59,427	D	4	..	..	.....	.....	.....	7,684
Illinois.....	3,956,522	2,282,999	1,570,393	712,606	D	29	..	..	7,530	3,439	801	91,360
Indiana.....	1,650,897	934,974	691,570	243,404	D	14	..	..	3,856	.....	1,090	19,407
Iowa.....	1,142,733	621,756	487,977	133,779	D	11	..	..	1,373	1,182	506	29,939
Kansas.....	865,013	464,520	397,727	66,793	D	9	..	..	2,766	.....	.....	.....
Kentucky.....	926,206	541,944	369,702	172,242	D	11	..	..	632	929	204	12,795
Louisiana.....	329,778	292,894	36,791	256,103	D	10	..	..	.....	.....	.....	93
Maine.....	304,240	126,333	168,823	42,490	R	..	5	783	334	257	7,710	.....
Maryland.....	624,896	389,612	231,435	158,177	D	8	..	..	1,629	.....	915	1,305
Massachusetts.....	1,840,357	942,716	768,613	174,103	D	17	..	..	5,111	1,032	2,930	119,955
Michigan.....	1,805,093	1,016,794	699,733	317,061	D	19	..	..	8,208	579†	3,384	76,395
Minnesota.....	1,129,975	698,811	350,461	348,350	D	11	..	..	2,872	.....	2,574	75,257
Mississippi.....	162,090	157,318	4,443	152,875	D	9	..	..	329	.....	.....	.....
Missouri.....	1,828,635	1,111,043	697,891	413,152	D	15	..	..	3,454	908	417	14,922
Montana.....	230,512	159,690	63,598	96,092	D	4	..	..	1,066	224	385	5,549
Nebraska.....	608,032	347,454	247,731	100,323	D	7	..	..	.....	.....	.....	12,847
Nevada.....	43,848	31,925	11,923	20,002	D	3	..	..	.....	.....	.....	.....
New Hampshire.....	218,114	108,460	104,642	3,798	D	4	..	..	.....	.....	193	4,819
New Jersey.....	1,820,437	1,083,850	720,322	363,528	D	16	..	..	3,931	926	1,639	9,769
New Mexico.....	168,920	105,838	61,710	44,128	D	3	..	..	343	62	43	924
New York.....	5,596,398	3,293,222†	2,180,670	837,628	D	47	..	..	86,897	.....	35,609	.....
North Carolina.....	839,462	616,141	223,283	392,858	D	13	..	..	21	.....	11	6
North Dakota.....	273,716	163,148	72,751	90,397	D	4	..	..	552	197	360	36,708
Ohio.....	3,012,425	1,747,122	1,127,709	619,413	D	26	..	..	117	.....	5,251	132,226
Oklahoma.....	749,740	501,069	245,122	255,947	D	11	..	..	2,221	1,328	.....	.....
Oregon.....	414,021	266,733	122,706	144,027	D	5	..	..	2,143	4	104	22,331
Pennsylvania.....	4,138,105	2,353,788	1,690,300	663,488	D	36	..	..	14,375	6,691	4,060	68,891
Rhode Island.....	311,149	165,233	125,012	40,221	D	4	..	..	.....	.....	411	20,493
South Carolina.....	115,437	113,791	1,646	112,145	D	8	..	..	.....	.....	.....	.....
South Dakota.....	296,452	160,137	125,977	34,160	D	4	..	..	.....	.....	.....	10,388
Tennessee.....	475,531	327,083	146,516	180,567	D	11	..	..	685	632	319	296
Texas.....	843,482	734,485	103,874	630,611	D	23	..	..	1,075	514	253	3,281
Utah.....	216,677	150,246	64,555	85,691	D	4	..	..	432	43	280	1,121
Vermont.....	143,689	62,124	81,023	18,899	R	..	3	.....	.....	.....	405	137
Virginia.....	334,590	234,980	98,336	136,644	D	11	..	..	313	594	98	269
Washington.....	692,338	459,579	206,892	252,687	D	8	..	..	3,496	1,041	1,907	19,423
West Virginia.....	830,073	502,582	325,486	177,096	D	8	..	..	832	1,173	.....	.....
Wisconsin.....	1,258,712	802,984	380,828	422,156	D	12	..	..	10,626	1,071	2,197	61,006
Wyoming.....	103,382	62,624	38,739	23,885	D	3	..	..	200	75	91	1,653
Total.....	45,647,117	27,751,597	16,679,583	10,797,090	D	523	8	187,720	37,661	80,159	910,397	.....

* Breakdown of other votes: Union (including Royal Oak, Independent, and Third) 882,470; Socialist Labor (including Labor, Industrial, and Independent Labor) 12,802; National Union for Social Justice 9,407; Independent Republican 3,222; Christian 1,598; scattering 889.

† Commonwealth votes.

‡ Includes 274,924 American Labor votes.

Presidential Election of 1940

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; Henry A. Wallace, Iowa.

Republican—Wendell L. Willkie, New York; Charles L. McNary, Oregon.

Socialist—Norman Thomas, New York; Maynard C. Krueger, Illinois.

Prohibition—Roger W. Babson, Massachusetts; Edgar V. Moorman, Illinois.

Communist—Earl Browder, Kansas; James W. Ford, New York.

Socialist Labor—John W. Aiken, Massachusetts; Aaron M. Orange, New York.

State	Total	Dem.	Rep.	Plur.	Electoral		Soc.	Prohib.	Comm.	Others*
					D	R				
Alabama.....	294,219	250,726	42,184	208,542	D	11	100	700	509	.....
Arizona.....	150,039	95,267	54,030	41,237	D	3	.....	742	.....	.....
Arkansas.....	201,838	158,622	42,122	116,500	D	9	301	793	.....	.....
California.....	3,268,791	1,877,618	1,351,419	526,199	D	22	.....	9,400	13,586	16,768
Colorado.....	549,004	265,554	279,576	14,022	R	6	1,899	1,597	378	.....
Connecticut.....	781,502	417,621	361,819†	55,802	D	8	.....	1,091	971	.....
Delaware.....	136,374	74,599	61,440	13,159	D	3	115	220	.....	.....
Florida.....	485,492	359,334	126,158	233,176	D	7	.....	.....	.....	.....
Georgia.....	312,553	265,194	23,934	241,260	D	12	.....	983	22,442	.....
Idaho.....	235,168	127,842	106,553	21,289	D	4	497	276	.....	.....
Illinois.....	4,217,935	2,149,934	2,047,240	102,694	D	29	10,914	9,190	657	.....
Indiana.....	1,782,747	874,063	899,466	25,403	R	14	2,075	6,437	706	.....
Iowa.....	1,215,430	578,800	632,370	53,570	R	11	.....	2,284	1,524	452
Kansas.....	860,297	364,725	489,169	124,444	R	9	2,347	4,056	.....	.....
Kentucky.....	970,063	557,222	410,384	146,838	D	11	1,014	1,443	.....	.....
Louisiana.....	372,305	319,751	52,446	267,305	D	10	.....	.....	108	.....
Maine.....	320,840	156,478	163,951	7,473	R	5	.....	411	.....	.....
Maryland.....	660,104	384,546	269,534	115,012	D	8	4,093	1,274	657	.....
Massachusetts.....	2,026,993	1,076,522	939,700	136,822	D	17	4,091	1,370	3,806	1,504
Michigan.....	2,085,929	1,032,991	1,039,917	6,926	R	19	7,593	1,795	2,834	799
Minnesota.....	1,251,188	644,196	596,274	47,922	D	11	5,454	2,711	2,553	.....
Mississippi.....	175,824	168,267	2,814	165,453	D	9	193	.....	4,550	.....
Missouri.....	1,833,729	958,476	871,009	87,467	D	15	2,226	1,809	209	.....
Montana.....	247,873	145,698	99,579	46,119	D	4	1,443	664	489	.....
Nebraska.....	615,878	263,677	352,201	88,524	R	7	.....	.....	.....	.....
Nevada.....	53,174	31,945	21,229	10,716	D	3	.....	.....	.....	.....
New Hampshire.....	235,419	125,292	110,127	15,165	D	4	.....	.....	.....	.....
New Jersey.....	1,974,920	1,016,442	945,478	70,964	D	16	2,837	872	8,836	455
New Mexico.....	183,014	103,699	79,315	24,384	D	3	.....	.....	.....	.....
New York.....	6,301,596	3,251,918†	3,027,478	224,440	D	47	18,950	3,250	.....	.....
North Carolina.....	822,648	609,015	213,633	395,382	D	13	.....	.....	.....	.....
North Dakota.....	280,775	124,036	154,590	30,554	R	4	1,279	325	545	.....
Ohio.....	3,319,912	1,733,139	1,586,773	146,366	D	26	.....	.....	.....	.....
Oklahoma.....	826,212	474,313	348,872	125,441	D	11	.....	3,027	.....	.....
Oregon.....	481,240	253,415	219,555	38,860	D	5	398	154	191	2,527
Pennsylvania.....	4,078,714	2,171,035	1,889,848	281,187	D	36	10,967	4,519	2,345	.....
Rhode Island.....	321,148	182,182	138,653	43,529	D	4	.....	74	239	.....
South Carolina.....	99,830	95,470	1,727	93,743	D	8	.....	.....	2,633	.....
South Dakota.....	308,427	131,362	177,065	45,703	R	4	.....	.....	.....	.....
Tennessee.....	522,823	351,601	169,153	182,448	D	11	463	1,606	.....	.....
Texas.....	1,041,168	840,151	199,152	640,999	D	23	728	925	212	.....
Utah.....	247,819	154,277	93,151	61,126	D	4	200	191	.....	.....
Vermont.....	143,062	64,269	78,371	14,102	R	3	.....	411	11	.....
Virginia.....	346,607	235,961	109,363	126,598	D	11	282	882	71	48
Washington.....	793,833	462,145	322,123	140,022	D	8	4,586	1,686	2,626	667
West Virginia.....	868,076	495,662	372,414	123,248	D	8	.....	.....	.....	.....
Wisconsin.....	1,405,540	704,821	679,206	25,615	D	12	15,071	2,148	2,394	1,900
Wyoming.....	112,240	59,287	52,633	6,654	D	3	148	172	.....	.....
Total.....	49,820,312	27,244,160	22,305,198	4,938,962	D	449	82	100,264	58,604	48,579
									63,507	

* Breakdown of other votes: Independent Democrat 22,428; Progressive 16,506; Socialist Labor 10,164; Independent Republican 4,550; Industrial 2,553; Jeffersonian Democrat 2,496; Industrial Government 1,518; Labor Party of Maryland 657; Alfred Knutson 545; Republican (Tolbert Faction) 137; scattering 1,953.

† Includes 798 Union votes.

‡ Includes 417,418 American Labor votes.

Presidential Election of 1944

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; Harry S. Truman, Missouri.

Republican—Thomas E. Dewey, New York; John W. Bricker, Ohio.

Socialist—Norman Thomas, New York; Darlington Hoopes, Pennsylvania.

Prohibition—Claude A. Watson, California; Andrew Johnson, Kentucky.

Socialist Labor*—Edward A. Teichert, Pennsylvania; Arla A. Albaugh, Ohio.

State	Total	Dem.	Rep.	Plur.	Electoral		Soc.	Prohib.	Soc. Lab.	Other†
					D	R				
Alabama.....	244,743	198,918	44,540	154,378	D 11	..	190	1,095	.....	.....
Arizona.....	137,634	80,926	56,287	24,639	D 4	..	.....	421	.....	.....
Arkansas.....	212,956	148,965	63,551	85,414	D 9	..	440	.....	.....	.....
California.....	3,520,875	1,988,564	1,512,965	475,599	D 25	..	3,923	14,770	327	326
Colorado.....	505,039	234,331	268,731	34,400	R ..	6	1,977	.....	.....	.....
Connecticut.....	831,990	435,146	390,527	44,619	D 8	..	5,097	.....	1,220	.....
Delaware.....	125,361	68,166	56,747	11,419	D 3	..	154	294	.....	.....
Florida.....	482,592	339,377	143,215	196,162	D 8	..	.....	.....	.....	.....
Georgia.....	328,109	268,187	56,507	211,680	D 12	..	6	36	.....	3,373
Idaho.....	208,321	107,399	100,137	7,262	D 4	..	282	503	.....	.....
Illinois.....	4,036,061	2,079,479	1,939,314	140,165	D 28	..	180	7,411	9,677	.....
Indiana.....	1,672,091	781,403	875,891	94,488	R ..	13	2,223	12,574	.....	.....
Iowa.....	1,052,599	499,876	547,267	47,391	R ..	10	1,511	3,752	193	.....
Kansas.....	733,776	287,458	442,096	154,638	R ..	8	1,613	2,609	.....	.....
Kentucky.....	867,921	472,589	392,448	80,141	D 11	..	535	2,023	326	.....
Louisiana.....	349,383	281,564	67,750	213,814	D 10	..	.....	.....	.....	69
Maine.....	296,400	140,631	155,434	14,803	R ..	5	.....	.....	335	.....
Maryland.....	608,439	315,490	292,949	22,541	D 8	..	.....	.....	.....	.....
Massachusetts.....	1,960,665	1,035,296	921,350	113,946	D 16	..	.....	973	2,780	266
Michigan.....	2,205,223	1,106,899	1,084,423	22,476	D 19	..	4,598	6,503	1,264	1,536
Minnesota.....	1,125,529	589,864	527,416	62,448	D 11	..	5,073	.....	3,176	.....
Mississippi.....	180,080	158,515	3,742	154,773	D 9	..	.....	.....	.....	17,823
Missouri.....	1,571,677	807,356	761,175	46,181	D 15	..	1,751	1,175	220	.....
Montana.....	207,355	112,556	93,163	19,393	D 4	..	1,296	340	.....	.....
Nebraska.....	563,126	233,246	329,880	96,634	R ..	6	.....	.....	.....	.....
Nevada.....	54,234	29,623	24,611	5,012	D 3	..	.....	.....	.....	.....
New Hampshire.....	229,625	119,663	109,916	9,747	D 4	..	46	.....	.....	.....
New Jersey.....	1,963,761	987,874	961,335	26,539	D 16	..	3,358	4,255	6,939	.....
New Mexico.....	152,225	81,389	70,688	10,701	D 4	..	.....	148	.....	.....
New York.....	6,316,790	3,304,238‡	2,987,647	316,591	D 47	..	10,553	.....	14,352	.....
North Carolina.....	790,554	527,399	263,155	264,244	D 14	..	.....	.....	.....	.....
North Dakota.....	220,171	100,144	118,535	18,391	R ..	4	943	549	.....	.....
Ohio.....	3,153,056	1,570,763	1,582,293	11,530	R ..	25	.....	.....	.....	.....
Oklahoma.....	722,636	401,549	319,424	82,125	D 10	..	.....	1,663	.....	.....
Oregon.....	480,147	248,635	225,365	23,270	D 6	..	3,785	2,362	.....	.....
Pennsylvania.....	3,794,793	1,940,479	1,835,054	105,425	D 35	..	11,721	5,750	1,789	.....
Rhode Island.....	299,276	175,356	123,487	51,869	D 4	..	.....	433	.....	.....
South Carolina.....	103,375	90,601	4,547	86,054	D 8	..	.....	365	.....	7,862
South Dakota.....	232,076	96,711	135,365	38,654	R ..	4	.....	.....	.....	.....
Tennessee.....	510,692	308,707	200,311	108,396	D 12	..	792	882	.....	.....
Texas.....	1,150,326	821,605	191,425	630,180	D 23	..	593	1,013	.....	135,690
Utah.....	248,319	150,088	97,891	52,197	D 4	..	340	.....	.....	.....
Vermont.....	125,361	53,820	71,527	17,707	R ..	3	.....	.....	.....	14
Virginia.....	388,485	242,276	145,243	97,033	D 11	..	417	459	90	.....
Washington.....	856,328	486,774	361,689	125,085	D 8	..	3,824	2,396	1,645	.....
West Virginia.....	715,596	392,777	322,819	69,958	D 8	..	.....	.....	.....	.....
Wisconsin.....	1,339,152	650,413	674,532	24,119	R ..	12	13,205	.....	1,002	.....
Wyoming.....	101,340	49,419	51,921	2,502	R ..	3	.....	.....	.....	.....
Total.....	47,976,263	25,602,504	22,006,285	3,596,219	D 432	99	80,426	74,754	45,335	166,959

* Industrial Government candidates in Minnesota, New York and Pennsylvania.

† Breakdown of other votes: Texas Regulars 135,439; Regular Democrat 9,964; Independent Republican 7,859; Southern Democrat 7,799; Independent Democrat 3,373; America First 1,781; Republican (Tolbert Faction) 63; scattering 681.

‡ Includes 496,405 American Labor and 329,235 Liberal votes.

Presidential Election of 1948

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Democratic—Harry S. Truman, Missouri; Alben Barkley, Kentucky.

Republican—Thomas E. Dewey, New York; Earl Warren, California.

States' Rights Democratic—J. Strom Thurmond, South Carolina; Fielding L. Wright, Mississippi.

Progressive¹—Henry A. Wallace, Iowa; Glen H. Taylor, Idaho.

Socialist—Norman Thomas, New York; Tucker P. Smith, Michigan.

Prohibition—Claude A. Watson, California; Dale Learn, Pennsylvania.

Socialist Labor²—Edward A. Teichert, Pennsylvania; Stephen Emery, New York.

State	Total	Dem.	Rep.	SR Dem.	Plur.	Electoral			Prog. ¹	Others ³
						D	R	S		
Alabama.....	214,980	(*)	40,930	171,443	130,513 S	..	..	11	1,522	1,085
Arizona.....	177,065	95,251	77,597	..	17,654 D	4	..	..	3,310	907
Arkansas.....	242,475	149,659	50,959	40,068	98,700 D	9	..	..	751	1,038
California.....	4,021,538	1,913,134	1,895,269	1,228 ⁵	17,865 D	25	..	..	190,381	21,526
Colorado.....	515,237	267,288	239,714	..	27,574 D	6	..	..	6,115	2,120
Connecticut.....	883,518	423,297	437,754	..	14,457 R	..	8	..	13,713	8,754
Delaware.....	139,073	67,813	69,588	..	1,775 R	..	3	..	1,050	622
Florida.....	577,643	281,988	194,280	89,755	87,708 D	8	..	..	11,620	..
Georgia.....	418,760	254,646	76,691	85,055	169,591 D	12	..	..	1,636	732
Idaho.....	214,816	107,370	101,514	..	5,856 D	4	..	..	4,972	960
Illinois.....	3,984,046	1,994,715	1,961,103	..	33,612 D	28	..	..	..	28,228
Indiana.....	1,656,214	807,833	821,079	..	13,246 R	..	13	..	9,649	17,653
Iowa.....	1,038,264	522,380	494,018	..	28,362 D	10	..	..	12,125	9,741
Kansas.....	788,819	351,902	423,039	..	71,137 R	..	8	..	4,603	9,275
Kentucky.....	822,658	466,756	341,210	10,411	125,546 D	11	..	..	1,567	2,714
Louisiana.....	416,326	136,344	72,657	204,290	67,946 S	..	..	10	3,035	..
Maine.....	264,787	111,916	150,234	..	38,318 R	..	5	..	1,884	753
Maryland.....	596,735	286,521	294,814	2,476 ⁵	8,293 R	..	8	..	9,983	2,941
Massachusetts.....	2,155,347	1,151,788	909,370	..	242,418 D	16	..	..	38,157	56,032
Michigan.....	2,109,609	1,003,448	1,038,595	..	35,147 R	..	19	..	46,515	21,051
Minnesota.....	1,212,226	692,966 ⁶	483,617	..	209,349 D	11	..	..	27,866	7,777
Mississippi.....	192,190	19,384 ⁷	5,043 ⁸	167,538 ⁹	148,154 S	..	..	9	225	..
Missouri.....	1,578,628	917,315	655,039	..	262,276 D	15	..	..	3,998	2,276
Montana.....	224,278	119,071	96,770	..	22,301 D	4	..	..	7,313	1,124
Nebraska.....	458,939	224,165	264,774	..	40,609 R	..	6	..	..	..
Nevada.....	62,117	31,291	29,357	..	1,934 D	3	..	..	1,469	..
New Hampshire.....	231,440	107,995	121,299	7	13,304 R	..	4	..	1,970	169
New Jersey.....	1,949,555	895,455	981,124	..	85,669 R	..	16	..	42,683	30,293
New Mexico.....	185,767	105,464	80,303	..	25,161 D	4	..	..	..	..
New York.....	6,274,527	2,780,204 ¹⁰	2,841,163	..	60,959 R	..	47	..	509,559	143,601
North Carolina.....	791,209	459,070	258,572	69,652	200,498 D	14	..	..	3,915	..
North Dakota.....	220,716	95,812	115,139	374	19,327 R	..	4	..	8,391	1,000
Ohio.....	2,936,071	1,452,791	1,445,684	..	7,107 D	25	..	..	37,596	..
Oklahoma.....	721,599	452,782	268,817	..	183,965 D	10	..	..	..	..
Oregon.....	524,080	243,147	260,904	..	17,757 R	..	6	..	14,978	5,051
Pennsylvania.....	3,735,149	1,752,426	1,902,197	..	149,771 R	..	35	..	55,161	25,365
Rhode Island.....	323,098	188,619	138,892	..	53,727 D	4	..	..	2,587	..
South Carolina.....	142,571	34,423	5,386	102,607	68,184 S	..	8	..	154	1
South Dakota.....	250,105	117,653	129,651	..	11,998 R	..	4	..	2,801	..
Tennessee.....	550,283	270,402	202,914	73,815	67,488 D	11	..	1	1,864	1,288
Texas.....	1,147,245	750,700	282,240	106,909	468,460 D	23	..	..	3,764	3,632
Utah.....	276,305	149,151	124,402	..	24,749 D	4	..	..	2,679	73
Vermont.....	123,382	45,557	75,926	..	30,369 R	..	3	..	1,279	620
Virginia.....	419,256	200,786	172,070	43,393	28,716 D	11	..	..	2,047	960
Washington.....	905,059	476,165	386,315	..	89,850 D	8	..	..	31,692	10,887
West Virginia.....	748,750	429,188	316,251	..	112,937 D	8	..	..	3,311	..
Wisconsin.....	1,276,800	647,310	590,959	..	56,351 D	12	..	..	25,282	13,249
Wyoming.....	101,425	52,354	47,947	..	4,407 D	3	..	..	931	193
Total.....	48,833,680	24,105,695	21,969,170	1,169,021	2,136,525 D	303	189	39	1,156,103	433,691

¹ Independent Progressive in California; Peoples in Connecticut; Independent in Kansas, Mississippi, Ohio, South Dakota; American Labor in New York; People's Progressive in Wisconsin. ² Industrial Government in Minnesota, New York, Pennsylvania; Independent Socialist Labor in Wisconsin. ³ Breakdown of other votes: Socialist 139,009; Prohibition 103,216; Socialist Labor 29,061; Socialist Workers 13,613; Christian Nationalist 42; Greenback 6; Vegetarian 4; blank 145,320; write-in 1,683; scattering 1,666; void 71. ⁴ Not on ballot. ⁵ Write-in votes. ⁶ Including Farmer-Labor votes. ⁷ National Democratic. ⁸ Contains 2,595 Republican and 2,448 Independent Republican votes. ⁹ Mississippi Democratic. ¹⁰ Includes 222,562 Liberal votes.

Electoral Vote for President, 1888-1924

States	1888	1892	1896	1900	1904	1908	1912	1916	1920	1924
	Harrison, Rep. Cleveland, Dem.	Cleveland, Dem. Harrison, Rep. Weaver, Peo.	McKinley, Rep. Bryan, Dem.	McKinley, Rep. Bryan, Dem.	Roosevelt, Rep. Parker, Dem.	Taft, Rep. Bryan, Dem.	Wilson, Dem. Taft, Rep. Roosevelt, Prog.	Wilson, Dem. Hughes, Rep.	Harding, Rep. Cox, Dem.	Coolidge, Rep. Davis, Dem. LaFollette, Prog.
Alabama	10	11	11	11	11	11	12	12	12	12
Arizona							3	3	3	3
Arkansas	7	8	8	8	9	9	9	9	9	9
California	8	8 1	8 1	9	10	10	2 11	13	13	13
Colorado	3	4	4	4	5	5	6	6	6	6
Connecticut	6	6	6	6	7	7	7	7	7	7
Delaware	3	3	3	3	3	3	3	3	3	3
Florida	4	4	4	4	5	5	6	6	6	6
Georgia	12	13	13	13	13	13	14	14	14	14
Idaho		3	3	3	3	3	4	4	4	4
Illinois	22	24	24	24	27	27	29	29	29	29
Indiana	15	15	15	15	15	15	15	15	15	15
Iowa	13	13	13	13	13	13	13	13	13	13
Kansas	9	10	10	10	10	10	10	10	10	10
Kentucky	13	13	12 1	13	13	13	13	13	13	13
Louisiana	8	8	8	8	9	9	10	10	10	10
Maine	6	6	6	6	6	6	6	6	6	6
Maryland	8	8	8	8	1 7	2 6	8	8	8	8
Massachusetts	14	15	15	15	16	16	18	18	18	18
Michigan	13	5 9	14	14	14	14	15	15	15	15
Minnesota	7	9	9	9	11	11	12	12	12	12
Mississippi	9	9	9	9	10	10	10	10	10	10
Missouri	16	17	17	17	18	18	18	18	18	18
Montana		3	3	3	3	3	4	4	4	4
Nebraska	5	8	8	8	8	8	8	8	8	8
Nevada	3	3	3	3	3	3	3	3	3	3
New Hampshire	4	4	4	4	4	4	4	4	4	4
New Jersey	9	10	10	10	12	12	14	14	14	14
New Mexico							3	3	3	3
New York	36	36	36	36	39	39	45	45	45	45
North Carolina	11	11	11	11	12	12	12	12	12	12
North Dakota		1 1 1	3	3	4	4	5	5	5	5
Ohio	23	1 22	23	23	23	23	24	24	24	24
Oklahoma						7	10	10	10	10
Oregon	3	3 1	4	4	4	4	5	5	5	5
Pennsylvania	30	32	32	32	34	34	38	38	38	38
Rhode Island	4	4	4	4	4	4	5	5	5	5
South Carolina	9	9	9	9	9	9	9	9	9	9
South Dakota		4	4	4	4	4	5	5	5	5
Tennessee	12	12	12	12	12	12	12	12	12	12
Texas	13	15	15	15	18	18	20	20	20	20
Utah			3	3	3	3	4	4	4	4
Vermont	4	4	4	4	4	4	4	4	4	4
Virginia	12	12	12	12	12	12	12	12	12	12
Washington		4	4	4	5	5	7	7	7	7
West Virginia	6	6	6	6	7	7	8	1 7	8	8
Wisconsin	11	12	12	12	12	13	13	13	13	13
Wyoming		3	3	3	3	3	3	3	3	3
Total	233 168	277 145 22	271 176	292 155	336 140	321 162	435 8 88	277 254	404 127	382 136 13

NOTE: For electoral votes by state in elections later than 1924, see preceding pages.

CONGRESS

Representatives Under Each Apportionment

Source: The Congressional Directory.

The apportionment based on the Sixteenth Census (1940) distributes the 435 seats in the House among the States according to the method of equal proportions. By this method the percent difference between the average number of Representatives per million people in any 2 States is made as small as possible. Also, the per cent difference between the average districts, i.e., the average number of persons per Representative, in any 2 States is made as small as possible. By equalizing the representation of all pairs of States, the method gives as nearly equal representation as possible to all States in proportion to their population.

Apportionment based on the Seventeenth Census (1950) will not be made until official population figures are obtained for the States. At that time, Congress may either enlarge the House or retain the same number of seats and redistribute them among the States.

State	Constitutional apportionment	First Census, 1790	Second Census, 1800	Third Census, 1810	Fourth Census, 1820	Fifth Census, 1830	Sixth Census, 1840	Seventh Census, 1850	Eighth Census, 1860	Ninth Census, 1870	Tenth Census, 1880	Eleventh Cen- sus, 1890	Twelfth Census, 1900	Thirteenth Cen- sus, 1910*	Fifteenth Cen- sus, 1930	Sixteenth Cen- sus, 1940
Alabama.....				1	3	5	7	7	6	8	8	9	9	10	9	9
Arizona.....														1	1	2
Arkansas.....						1	1	2	3	4	5	6	7	7	7	7
California.....							2	2	3	4	6	7	8	11	20	23
Colorado.....										1	1	2	3	4	4	4
Connecticut.....	5	7	7	7	6	6	4	4	4	4	4	4	5	5	6	6
Delaware.....	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
Florida.....							1	1	1	2	2	2	3	4	5	6
Georgia.....	3	2	4	6	7	9	8	8	7	9	10	11	11	12	10	10
Idaho.....												1	1	2	2	2
Illinois.....				1	1	3	7	9	14	19	20	22	25	27	27	26
Indiana.....				1	3	7	10	11	11	13	13	13	13	13	12	11
Iowa.....							2	2	6	9	11	11	11	11	9	8
Kansas.....									1	3	7	8	8	8	7	6
Kentucky.....		2	6	10	12	13	10	10	9	10	11	11	11	11	9	9
Louisiana.....				1	3	3	4	4	5	6	6	6	7	8	8	8
Maine.....				7	7	8	7	6	5	5	4	4	4	4	3	3
Maryland.....	6	8	9	9	9	8	6	6	5	6	6	6	6	6	6	6
Massachusetts.....	8	14	17	13	13	12	10	11	10	11	12	13	14	16	15	14
Michigan.....						1	3	4	6	9	11	12	12	13	17	17
Minnesota.....								2	2	3	5	7	9	10	9	9
Mississippi.....				1	1	2	4	5	5	6	7	7	8	8	7	7
Missouri.....					1	2	5	7	9	13	14	15	16	16	13	13
Montana.....											1	1	1	2	2	2
Nebraska.....									1	1	3	6	6	6	5	4
Nevada.....									1	1	1	1	1	1	1	1
New Hampshire.....	3	4	5	6	6	5	4	3	3	3	2	2	2	2	2	2
New Jersey.....	4	5	6	6	6	6	5	5	5	7	7	8	10	12	14	14
New Mexico.....														1	1	2
New York.....	6	10	17	27	34	40	34	33	31	33	34	34	37	43	45	45
North Carolina.....	5	10	12	13	13	13	9	8	7	8	9	9	10	10	11	12
North Dakota.....											1	1	2	3	2	2
Ohio.....			1	6	14	19	21	21	19	20	21	21	21	22	24	23
Oklahoma.....													5	8	9	8
Oregon.....								1	1	1	1	2	2	3	3	4
Pennsylvania.....	8	13	18	23	26	28	24	25	24	27	28	30	32	36	34	33
Rhode Island.....	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2
South Carolina.....	5	6	8	9	9	9	7	6	4	5	7	7	7	7	6	6
South Dakota.....											2	2	2	3	2	2
Tennessee.....		1	3	6	9	13	11	10	8	10	10	10	10	10	9	10
Texas.....							2	2	4	6	11	13	16	18	21	21
Utah.....												1	1	2	2	2
Vermont.....		2	4	6	5	5	4	3	3	3	2	2	2	2	1	1
Virginia.....	10	19	22	23	22	21	15	13	11	9	10	10	10	10	9	9
Washington.....											1	2	3	5	6	6
West Virginia.....										3	4	4	5	6	6	6
Wisconsin.....							2	3	6	8	9	10	11	11	10	10
Wyoming.....											1	1	1	1	1	1
Total.....	65	106	142	186	213	242	232	237	243	293	332	357	391	435	435	435

* No apportionment was made in 1920.

BIOGRAPHIES OF THE PRESIDENTS

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GEORGE WASHINGTON

was born on February 22 (February 11, old style), 1732, in Westmoreland County, Virginia. His early training was as a surveyor; but in 1752 he was appointed adjutant in the Virginia militia, and for the next three years he took an active part in the wars against the French and Indians, serving as General Braddock's aide in the disastrous campaign against Fort Duquesne. In 1759 he resigned from the militia, married Martha Dandridge Custis, a widow, and settled down as a gentleman farmer at Mount Vernon.

As a militiaman, he had been exposed to the arrogance of the British officers, and his experience as a planter with British commercial restrictions increased his anti-British sentiment. He opposed the Stamp Act of 1765 and after 1770 became increasingly prominent in organizing resistance. A delegate to the Continental Congress, Washington was selected as commander in chief of the Continental Army and took command at Cambridge, Massachusetts, on July 3, 1775.

Inadequately supported and sometimes covertly sabotaged by the Congress, in charge of troops who were inexperienced, badly equipped and impatient of discipline, Washington conducted the war on the policy of avoiding major engagements with the British and wearing them down by harassing tactics. His able generalship, along with the French alliance and the growing weariness within Britain, brought the war to a conclusion with the surrender of Cornwallis at Yorktown on October 19, 1781.

The chaotic years under the Articles of Confederation led Washington to return to public life in the hope of promoting the formation of a strong central government. He presided over the Constitutional Convention and yielded to the universal demand that he serve as first President. In office, he sought to unite the nation in the service of establishing the authority of new government at home and abroad. Greatly distressed by the emergence of the Hamilton-Jefferson rivalry, he worked to maintain neutrality but actually sympathized more with Hamilton. Following his unanimous re-election in 1792, his second term was dominated by the Federalists. His Farewell Address rebuked party spirit and warned against foreign entanglements.

He died at Mt. Vernon on December 14, 1799. Tall, dignified and impressive, Washington gave a public impression of austerity, though he was capable of gaiety in

private. His life was characterized by a strict sense of duty to his people. The standard biographies are by Fitzpatrick, Ford, Hughes and Stephenson.

JOHN ADAMS

was born on October 30 (October 19, old style), 1735, at Braintree (now Quincy), Massachusetts. A Harvard graduate, he considered teaching and the ministry but finally turned to law and was admitted to the bar in 1758. He opposed the Stamp Act, served as lawyer for patriots indicted by the British and, by the time of the Continental Congresses, was in the vanguard of the movement for independence. In 1778 he went to France as commissioner. Subsequently he helped negotiate the peace treaty with Britain, and in 1785 became the U. S. envoy to London. Resigning in 1788, he was elected Vice President under Washington, and was re-elected in 1792.

Though a Federalist, Adams did not get along with Hamilton who sought to prevent his election to the presidency in 1796, and thereafter intrigued against his administration. Adams was chosen with 71 electoral votes to 68 for his closest competitor, Thomas Jefferson, who became Vice President. In 1798 Adams' independent policy averted a war with France but completed the break with Hamilton and the right-wing Federalists while, at the same time, the enactment of the Alien and Sedition Acts, directed against foreigners and against critics of the government, exasperated the Jeffersonian opposition. The split between Adams and Hamilton elected Jefferson in 1800. Adams retired to his home in Quincy, Massachusetts. He later corresponded with Jefferson and they died on the same day, July 4, 1826.

Stout, somewhat vain and irascible, Adams was honest, fearless and essentially fair-minded. His *Defence of the Constitutions of Government of the United States* (1787) contains original and striking if conservative political ideas. He married Abigail Smith in 1764, and their life together was long and happy. The standard biographies are by Morse and Chinard.

THOMAS JEFFERSON

was born on April 13 (April 2, old style), 1743, at Shadwell in Goochland (now Albemarle) County, Virginia. A William and Mary graduate, he studied law but from the start showed an interest in science and philosophy. His literary skill and political clarity brought him to the forefront

of the revolutionary movement in Virginia. As delegate to the Continental Congress, he drafted the Declaration of Independence. In 1776 he entered the Virginia House of Delegates and initiated a comprehensive reform program for the abolition of feudal survivals in land tenure and the separation of church and state.

In 1779 he became governor, but constitutional limitations on his power combined with his own lack of executive energy caused an unsatisfactory administration, culminating in Jefferson's virtual abdication when the British invaded Virginia in 1781. He now retired to his beautiful home at Monticello, to his wife, Martha Wayles Skelton, whom he had married in 1772 and who died in 1782, and to his children.

Jefferson's Notes on Virginia (1784-85) illustrate his many-faceted interests, his limitless intellectual curiosity, his deep faith in agrarian democracy. Sent to Congress in 1783, he helped lay down the decimal system and drafted basic reports on the organization of the western lands. In 1785 he was appointed minister to France, where the Anglo-Saxon liberalism he had drawn from Locke was stimulated by contact with the thought which would soon ferment in the French Revolution. In 1789 Washington appointed him Secretary of State. While favoring the Constitution and a strengthened central government, Jefferson came to believe that Hamilton contemplated the establishment of a monarchy. Growing differences resulted in Jefferson's resignation on Dec. 31, 1793.

Elected Vice President in 1796, Jefferson continued to serve as spiritual leader of the opposition to Federalism, particularly to the repressive Alien and Sedition Acts. He was elected President in 1801 by the House of Representatives as a result of Hamilton's decision to throw the Federalist votes to him rather than to Aaron Burr, who had tied him in electoral votes. The purchase of Louisiana from France in 1803, though in violation of his earlier constitutional scruples, was the most notable act of his administration. Re-elected in 1804 with 162 electoral votes to 14 for the Federalist Charles C. Pinckney, Jefferson tried desperately during his second term to keep the United States out of the Napoleonic Wars in Europe, employing to this end the unpopular embargo policy.

After his retirement to Monticello in 1809, he developed his interest in education, founding the University of Virginia and watching its development with never-flagging interest. He died at Monticello on July 4, 1826. Tall, loose-jointed, a poor speaker, Jefferson had an enormous variety of interests and skills, ranging from education and science to architecture and music. Economically his conception of democracy presupposed an essentially rural

community of small freeholds; but his deep and abiding faith in the common man provides inspiration for future generations. The standard biographies are by Chinard, Bowers, Kimball, Randall and Malone.

JAMES MADISON

was born in Port Conway, Virginia, on March 16 (March 5, old style), 1751. A Princeton graduate, he threw himself into the struggle for independence on his return to Virginia in 1771. In the seventies and eighties he was active both in state politics, where he championed the Jefferson reform program, and in the Continental Congress. He was influential in the Constitutional Convention as leader of the group favoring a strong central government and as recorder of the debates; and he subsequently wrote, in collaboration with Alexander Hamilton and John Jay, the *Federalist* papers to aid the campaign for the adoption of the Constitution.

In the new Congress, Madison soon emerged as the leader in the House of the men who opposed Hamilton's financial program and his pro-British leanings in foreign policy. Retiring from Congress in 1797, he continued active in Virginia and drafted the Virginia Resolution protesting the Alien and Sedition Acts. His intimacy with Jefferson made him natural choice for Secretary of State in 1801.

In 1809 Madison succeeded Jefferson as President, with 122 electoral votes to 47 for the Federalist, C. C. Pinckney, and 6 scattering. His attractive wife, Dolly Payne Todd, whom he married in 1794, brought a new social sparkle to the executive mansion. In the meantime, increasing tension with Britain culminated in the War of 1812—a war for which the United States was unprepared, and for which Madison lacked the executive talent to clear out incompetence and mobilize the nation's energies. Madison was re-elected in 1812, with 128 electoral votes to 89 for the Federalist, De Witt Clinton. In 1814 the British actually captured Washington and forced Madison to flee to Virginia.

In his domestic program, Madison capitulated to the Hamiltonian policies that he had resisted twenty years before, signing bills to establish a United States Bank and a higher tariff. Following his presidency, he remained in retirement in Virginia until his death on June 28, 1836. Small, wrinkled, unimpressive, Madison had an acute political intelligence but lacked executive force. The standard lives are by Hunt, Brant and Rives.

JAMES MONROE

was born on April 28, 1758, in Westmoreland County, Virginia. A William and Mary graduate, he served in the army during

the first years of the Revolution and was wounded at Trenton. He then entered Virginia politics and later national politics under the sponsorship of Jefferson. In 1786 he married Eliza Kortright.

Fearing centralization, Monroe opposed the adoption of the Constitution and, as senator from Virginia, was highly critical of the Hamiltonian program. In 1794 he was appointed minister to France where his ardent sympathies with the Revolution exceeded the wishes of the State Department. A troubled diplomatic career ended with his recall in 1796. From 1799 to 1802 he was governor of Virginia. In 1803 Jefferson sent him to France to help negotiate the Louisiana Purchase and for the next few years he was active in various continental negotiations.

In 1808 Monroe flirted with the radical wing of the Republican party, which opposed Madison's candidacy; but the presidential boom came to naught and, after a brief term as governor of Virginia in 1811, Monroe accepted Madison's offer of the State Department. During the war he vainly sought a field command and served as Secretary of War from Sept., 1814, to Mar., 1815.

Elected President in 1816 with 183 electoral votes to 34 for the Federalist Rufus King, and re-elected without opposition in 1820, Monroe, the last of the Virginia dynasty, pursued the course of systematic tranquilization which won for his terms the name "the era of good feeling." He continued Madison's surrender to the Hamiltonian domestic program, signed the Missouri Compromise, acquired Florida and, with the able assistance of his Secretary of State, John Quincy Adams, promulgated the Monroe Doctrine in 1823, declaring against foreign colonization or intervention in the Americas. He died in New York City on July 4, 1831.

A sound man of medium abilities, Monroe possessed qualities of judgment rather than of leadership. The standard biographies are by Morgan, Gilman and Styron.

JOHN QUINCY ADAMS

was born on July 11, 1767, at Braintree (now Quincy), Massachusetts, the son of John Adams. He spent his early years in Europe with his father, graduated from Harvard and entered law practice. His anti-Jeffersonian newspaper articles won him political attention. In 1794 he became minister to the Netherlands, the first of several diplomatic posts which occupied him until his return to Boston in 1801. In 1797 he married Louisa Catherine Johnson.

In 1803 he was elected to the Senate, nominally as a Federalist, but his repeated displays of independence on such issues as the Louisiana Purchase and the embargo caused his party to compel his resignation

and ostracize him socially. In 1809 Madison rewarded him for his support of Jefferson by appointing him minister to St. Petersburg. He helped negotiate the Treaty of Ghent in 1814 and in 1815 became minister to London. In 1817 Monroe appointed him Secretary of State where he served with great distinction, gaining Florida from Spain without hostilities and playing an equal part with Monroe in formulating the Monroe Doctrine.

When no presidential candidate received a majority of electoral votes in 1824, Adams, with the support of Henry Clay, was elected by the House in 1825 over Andrew Jackson who had the original plurality. Adams had ambitious plans of government activity to foster internal improvements and promote the arts and sciences; but congressional obstructionism combined with his own unwillingness or inability to play the role of a politician meant that little was accomplished. Retiring to Quincy after his defeat in 1828, he was elected to the House of Representatives in 1831 where, though nominally a Whig, he pursued as ever an independent course. He led the fight to force Congress to receive anti-slavery petitions and fathered the Smithsonian Institution.

Stricken on the floor of the House, he died on February 23, 1848. Tactless, brusque, conscientious, a rough and savage debater, Adams spared neither himself nor his enemies. His long and detailed *Diary* gives a unique picture of the personalities and politics of the times. The standard biographies are by Morse and Clark.

ANDREW JACKSON

was born on March 15, 1767, in what is now generally agreed to be Waxhaw, South Carolina. After a turbulent boyhood as an orphan and a British prisoner, he moved west to Tennessee where he soon qualified for law practice but found time for such frontier pleasures as horse racing, cock-fighting and dueling. His marriage to Rachel Donelson Robards in 1791 was complicated by subsequent legal uncertainties about the status of her divorce. During the seventeen-nineties Jackson served in the Tennessee constitutional convention, the federal House of Representatives, the federal Senate and the Tennessee supreme court.

After some years as a country gentleman, living at the Hermitage near Nashville, Jackson in 1812 was given command of Tennessee troops sent against the Creeks. He defeated the Indians at Horseshoe Bend in 1814; subsequently he became a major general and won the Battle of New Orleans over veteran British troops though after the treaty of peace had been signed at Ghent. In 1818 General Jackson invaded Florida, captured Pensacola and hanged two Englishmen named Arbuthnot and

Ambrister, creating an international incident. A presidential boom began for him in 1821 and in its service he returned to the Senate (1823-25). Though he won a plurality of electoral votes in 1824, he lost in the House when Clay threw his strength to Adams; he won easily in 1828 by an electoral vote of 178 to 83.

As President, Jackson greatly expanded the power and prestige of the presidential office and carried through an unexampled program of domestic reform, vetoing the bill to extend the United States Bank, moving toward a hard-money currency policy and checking the program of federal internal improvements. He also vindicated federal authority against South Carolina with its doctrine of nullification and against France on the question of debts. The support given his policies by the workmen of the East as well as by the farmers of the East, West and South resulted in his triumphant re-election in 1832 over Clay by an electoral vote of 219 to 49, with 18 scattering and 2 not cast.

After watching the inauguration of his hand-picked successor, Martin Van Buren, Jackson retired to the Hermitage where he maintained a lively interest in national affairs until his death on June 8, 1845. A tall, dignified man with a drawn and wrinkled face, Jackson has been endowed by partisan historians with a violence and irascibility he appears not to have possessed. His great contribution was to adjust the presidential office and the democratic doctrines of Jefferson to the new situation created by the Industrial Revolution. The standard biographies are by James, Bassett and Parton.

MARTIN VAN BUREN

was born on December 5, 1782, at Kinderhook, New York. After graduating from the village school, he became a law clerk, entered practice in 1803 and soon became active in state politics as state senator and attorney general. In 1821 he was elected to the United States Senate. He threw the support of his efficient political organization, known as the Albany Regency, to William H. Crawford in 1824 and to Jackson in 1828. After leading the opposition to Adams' administration in the Senate, he served briefly as governor of New York and resigned to become Jackson's Secretary of State. He soon became on close personal terms with Jackson and played an important part in turning the Jacksonian program from the lines intended by his original Western backers.

In 1832 Van Buren became Vice President; in 1836, President, with an electoral vote of 170 against 124 scattered among four opponents. The Panic of 1837 overshadowed his term. He attributed it to

the overexpansion of the credit and favored the establishment of an independent treasury as repository for the federal funds. In 1840 he established a ten-hour day on public works. Defeated by Harrison in 1840, he was the leading contender for the Democratic nomination in 1844 until he publicly opposed immediate annexation of Texas and was subsequently beaten by the Southern delegations at the Baltimore convention. This incident increased his growing misgivings about the slave power.

After working behind the scenes among the antislavery Democrats, Van Buren joined in the movement which led to the Free-Soil party and became its candidate for President in 1848. He subsequently returned to the Democratic party while continuing to object to its pro-Southern policy. He died in Kinderhook on July 24, 1862. His *Autobiography* throws valuable sidelights on the political history of the times.

Small, erect, dapper, Van Buren had a reputation for slick politicking which won him such sobriquets as the Little Magician and the Red Fox of Kinderhook; but, as his later career showed, he was capable of taking firm and unpopular stands on public issues. His wife Hannah Hoes, whom he married in 1807, died in 1819.

The standard biographies are by Shepard and Lynch.

WILLIAM HENRY HARRISON

was born in Charles City County, Virginia, on February 9, 1773. Joining the army in 1791, he was active in Indian fighting in the Northwest, became secretary of the Northwest Territory in 1798 and governor of Indiana in 1800. He married Anna Symmes in 1795. Growing discontent over white encroachments on Indian lands led to the formation of an Indian alliance under Tecumseh to resist further aggressions. In 1811 Harrison won a nominal victory over the Indians at Tippecanoe and in 1813 a more decisive one at the Battle of the Thames, where Tecumseh was killed.

After resigning from the army in 1814, Harrison had an obscure career in politics and diplomacy, ending up in twenty years as a county recorder in Ohio. Nominated for President in 1835 as a military hero whom the conservative politicians hoped to be able to control, he ran surprisingly well against Van Buren in 1836. Four years later he defeated Van Buren by an electoral vote of 234 to 60 but caught pneumonia and died in Washington a month after his inauguration, April 4, 1841. Harrison's qualities were those of a soldier rather than of a statesman or political leader. The standard biographies are by Cleaves and Goebel.

JOHN TYLER

was born in Charles City County, Virginia, on March 29, 1790. A William and Mary graduate, he entered law practice and politics, serving in the House of Representatives (1816-21) and later as governor of Virginia (1825-27), and as senator. A thorough-going strict constructionist, he supported Crawford in 1824 and Jackson in 1828 but broke with Jackson over his Bank policy and became a member of the Southern state-rights group which co-operated with the Whigs. In 1836 he resigned from the Senate rather than follow instructions from the Virginia legislature to vote for a resolution expunging censure of Jackson from the Senate record.

Elected Vice President on the Whig ticket in 1840, Tyler succeeded to the presidency on Harrison's death. His strict-constructionist views soon caused a split with the Henry Clay wing of the Whig party and a stalemate on domestic questions. Tyler's more considerable achievements were his support of the Webster-Ashburton Treaty with Britain and his success in bringing about the annexation of Texas through joint congressional resolution.

After his presidency he lived in retirement in Virginia until the outbreak of the Civil War when he emerged briefly as chairman of a peace convention and then as delegate to the provisional Congress of the Confederacy. He died on January 18, 1862. He was married first to Letitia Christian March in 1813 and, two years after her death in 1842, to Julia Gardiner. Witty, amiable, courteous, Tyler was a Virginia gentleman whose presidency was hamstrung by the basic contradiction between his own ideas and those of the party which put him on the ticket as Vice President. The standard biographies are by Chitwood and Tyler.

JAMES KNOX POLK

was born in Mecklenburg County, North Carolina, on November 2, 1795. A graduate of the University of North Carolina, he moved west to Tennessee, was admitted to the bar and soon became prominent in state politics. In 1825 he was elected to the House of Representatives where he opposed Adams and, after 1829, became Jackson's floor leader in the fight against the Bank. In 1835 he became Speaker of the House. In 1839 he was elected governor of Tennessee but was beaten in tries for re-election in 1841 and 1843.

The supporters of Van Buren for the Democratic nomination in 1844 counted on Polk as his running mate; but, when Van Buren's stand on Texas alienated Southern support, the convention swung to Polk on the ninth ballot. He was elected over Henry Clay, the Whig candidate, by an

electoral vote of 170 to 105. Rapidly disillusioning those who thought that he would not run his own administration, Polk proceeded steadily and precisely to achieve four major objectives—the acquisition of California, the settlement of the Oregon question, the reduction of the tariff and the establishment of the independent treasury. He also enlarged the Monroe Doctrine to exclude all non-American intervention in American affairs, whether forcible or not, and he forced Mexico into a war which he waged to a successful conclusion. His wife Sarah Childress, whom he married in 1824, was a woman of charm and ability. Polk died in Nashville, Tennessee, on June 15, 1849.

Serious, hardworking, lacking in color, Polk has long been underrated by historians who mistakenly regarded him as a slaveholders' puppet; in fact, few presidents have so thoroughly controlled their own administration or have so ably accomplished the purposes they set for themselves. Polk's *Diary* reflects the mood and problems of his presidency. The standard biography is by McCormac.

ZACHARY TAYLOR

was born at Montebello, Orange County, Virginia, on November 24, 1784. Embarking on a military career in 1808, Taylor fought in the War of 1812, the Black Hawk War and the Seminole War, holding in between garrison jobs on the frontier or desk jobs in Washington. A brigadier general as a result of his victory over the Seminoles at Lake Okeechobee (1837), Taylor held a succession of Southwestern commands and in 1846 established a base on the Rio Grande, where his forces engaged in hostilities which precipitated the war with Mexico. He captured Monterrey in Sept., 1846, and, disregarding Polk's orders to stay on the defensive, defeated Santa Anna at Buena Vista in February, 1847, ending the war in the northern provinces.

Though Taylor had never cast a vote for President, his party affiliations were Whiggish, and his availability was increased by his difficulties with Polk. He was elected President over the Democrat Lewis Cass by an electoral vote of 163 to 127. During the revival of the slavery controversy, which was to result in the Compromise of 1850, Taylor began to take an increasingly firm stand against appeasing the South; but he died in Washington on July 9, 1850, in the midst of the fight over the Compromise. He married Margaret Mackall Smith in 1810. His bluff and simple soldierly qualities won him the name of Old Rough and Ready. During his brief term as President he displayed a growing insight into political questions. The standard biographies are by Hamilton and by Bent and McKinley.

MILLARD FILLMORE

was born at Locke, Cayuga County, New York, on January 7, 1800. A lawyer, he entered politics as an Antimason under the sponsorship of Thurlow Weed, editor and party boss, and subsequently followed Weed into the Whig party. He served in the House of Representatives (1833-35 and 1837-43) and played a leading role in writing the tariff of 1842. Defeated for governor of New York in 1844, he became comptroller in 1848, was put on the Whig ticket with Taylor as a concession to the Clay wing of the party and became President upon Taylor's death in 1850.

As President, Fillmore broke with Weed and William H. Seward and associated himself with the pro-Southern Whigs, supporting the Compromise of 1850. Defeated for the Whig nomination in 1852, he ran for President in 1856 as candidate of the American or Know-Nothing party, which sought to unite the country against foreigners in the alleged hope of diverting it from the explosive slavery issue. Fillmore opposed Lincoln during the Civil War. He died in Buffalo on March 8, 1874. He was married in 1826 to Abigail Powers, who died in 1853, and in 1858 to Caroline Carmichael McIntosh. Urbane, gracious, colorless and weak, Fillmore was an undistinguished President. The standard biography is by Griffiths.

FRANKLIN PIERCE

was born at Hillsboro, New Hampshire, on November 23, 1804. A Bowdoin graduate and lawyer, he won rapid political advancement in the Democratic party, in part because of the prestige of his father, Governor Benjamin Pierce. By 1831 he was Speaker of the New Hampshire House of Representatives; from 1833 to 1837 he served in the federal House and from 1837 to 1842 in the Senate. His wife, Jane Means Appleton, whom he had married in 1834, disliked Washington and the somewhat dissipated life led by Pierce; and in 1842 Pierce, resigning from the Senate, took up a successful law practice in Concord, New Hampshire.

During the Mexican War Pierce was a brigadier general. Thereafter he continued to oppose antislavery tendencies within the Democratic party. As a result, he was the Southern choice to break the deadlock at the Democratic convention of 1852 and was nominated on the 49th ballot. Pierce rolled up 254 electoral votes to 42 for Winfield Scott, the Whig candidate.

As President, Pierce followed a course of appeasing the South at home and of playing with schemes of territorial expansion abroad. The failure of both his foreign and domestic policies prevented his renomination; and he died in Concord, New Hampshire, on October 8, 1869, in relative ob-

scurity. A kindly and courteous person, Pierce was weak, unstable and lacking in presidential qualities. The standard biography is by Nichols.

JAMES BUCHANAN

was born near Mercersburg, Pennsylvania, on April 23, 1791. A Dickinson graduate and a lawyer, he entered Pennsylvania politics as a Federalist. With the disappearance of the Federalist party, he became a Jacksonian Democrat. He served with ability in the House (1821-31), as minister to St. Petersburg (1832-33) and in the Senate (1834-45), and in 1845 became Polk's Secretary of State. Disappointed in the presidential nomination in 1852, Buchanan became minister to Britain in 1853 where he participated with other American diplomats in Europe in drafting the expansionist Ostend Manifesto.

In 1856 Buchanan received the Democratic nomination and won the election, gaining 174 electoral votes to 114 for John C. Frémont, the Republican candidate, and 8 for Millard Fillmore, American party. The growing crisis over slavery presented Buchanan with problems he lacked the will to tackle. His appeasement of the South alienated the Stephen Douglas wing of the Democratic party without reducing Southern militancy on slavery issues. While denying the right of secession, Buchanan also denied that the federal government could do anything about it. He supported the administration during the Civil War and died in Lancaster, Pennsylvania, on June 1, 1868.

The only President to remain a bachelor throughout his term, Buchanan used his charming niece Harriet Lane as White House hostess. Legalistic, indecisive and timorous as President, Buchanan filled his other public offices capably. The standard biography is by Curtis.

ABRAHAM LINCOLN

was born in Hardin (now Larue) County, Kentucky, on February 12, 1809. His family moved to Indiana and then to Illinois, and Lincoln gained what education he could along the way. While reading law, he worked in a store, managed a mill, surveyed, and split rails. In 1834 he went to the state legislature as a Whig and became the party's floor leader. For the next twenty years he remained in law practice in Springfield, except for a single term (1847-49) in Congress where he denounced the Mexican War. In 1855 he was a candidate for senator and in 1856 he joined the new Republican party.

A leading but unsuccessful candidate for the vice-presidential nomination with Frémont, Lincoln gained national attention in 1858 when, as Republican candidate for

senator from Illinois, he engaged in a series of debates with Stephen A. Douglas, the Democratic candidate. He lost the senatorial election, but continued to prepare the way for the 1860 Republican convention and was rewarded with the presidential nomination on the third ballot. He polled 180 electoral votes, as against the 123 of his three opponents, but had only a plurality of the popular vote.

From the start, Lincoln made clear that, unlike Buchanan, he believed the national government had the power to crush the rebellion. Not an abolitionist, he held the slavery issue subordinate to that of preserving the Union but soon perceived that the war could not be brought to a successful conclusion without freeing the slaves. His administration was hampered by the incompetence of many Union generals, the inexperience of the troops and the harassing political tactics both of the Republican Radicals, who favored a hard policy toward the South, and the Democratic Copperheads, who desired a negotiated peace. The Gettysburg Address of November 19, 1863, marks the high point in the record of American eloquence. His patient search for a winning combination finally brought Generals Ulysses S. Grant and William T. Sherman to the top; and their series of victories in 1864 dispelled the mutterings from both Radicals and Peace Democrats which at one time seemed to threaten Lincoln's re-election. He received 212 electoral votes to 21 for George B. McClellan, the Democratic candidate. His inaugural address urged leniency toward the South: "With malice toward none, with charity for all . . . let us strive on to finish the work we are in; to bind up the nation's wounds . . ." This policy aroused growing opposition on the part of the Republican Radicals, but Lincoln was shot by John Wilkes Booth at Ford's Theater, Washington, on April 14, 1865, before the matter could be put to test. He died the following day.

Lincoln's marriage to Mary Todd in 1842 was often unhappy and turbulent, in part because of his wife's pronounced instability. By his remarkable literary artistry, his essential patience and devotion, his profound sense of the importance of government by, for and of the people, by the manner of his life and of his death, Lincoln has won a unique place in the hearts of Americans. The standard biographies are by Sandburg, Herndon, Nicolay and Hay.

ANDREW JOHNSON

was born at Raleigh, North Carolina, on December 29, 1808. Self-educated, he became a tailor in Greeneville, Tennessee, but soon went into politics where he rose steadily. From 1843 to 1853 he served in the House of Representatives, 1853-57 as governor of Tennessee and in 1857 was

elected Senator. Politically he was a Jacksonian Democrat, and his specialty was the fight for a more equitable land policy. Alone among the Southern Senators, he stood by the Union during the Civil War. In 1862 he became war governor of Tennessee and carried out a thankless and difficult job with great courage. Johnson became Lincoln's running mate in 1864 as result of an attempt to give the ticket a nonpartisan and nonsectional character. Succeeding to the presidency on Lincoln's death, Johnson sought to carry out his policy but without his political skill. The result was a hopeless conflict with the Radical Republicans who dominated Congress, passed measures over Johnson's vetoes and attempted to limit the power of the executive concerning appointments and removals. The conflict culminated with Johnson's impeachment for attempting to remove his disloyal Secretary of War in defiance of the Tenure of Office Act which required senatorial concurrence for such dismissals. The opposition failed by one vote to get the two-thirds necessary for conviction.

After his presidency, Johnson maintained an interest in politics and in 1875 was elected to the Senate. He died near Carter Station, Tennessee, on July 31, 1875. He married Eliza McCordle in 1827. An honest, courageous and intelligent man, Johnson lacked the tact, patience and self-control to be an effective President.

The standard biographies are by Winston, Stryker and Milton.

ULYSSES SIMPSON GRANT

was born (as Hiram Ulysses Grant) at Point Pleasant, Ohio, on April 27, 1822. He finished West Point in 1843 and served without particular distinction in the Mexican War. In 1848 he married Julia Dent. He resigned from the army in 1854, following warnings from his commanding officer about his drinking habits, and for the next six years held a wide variety of jobs in the Middle West. With the outbreak of the Civil War, he sought a command and soon, to his surprise, was made a brigadier general. His continuing successes in the western theaters, culminating in the capture of Vicksburg in 1863, brought him national fame and soon the command of all the Union armies. His dogged, implacable policy of concentrating on dividing and destroying the Confederate armies brought the war to an end in 1865. In 1866 he was made full general.

Grant's relations with Johnson grew steadily worse; and in 1868, as the Republican candidate for President, Grant was elected with 214 electoral votes to 80 for the Democrat Horatio Seymour. From the start Grant showed his unfitness for the office. His cabinet was weak, his do-

mestic policy was confused, many of his intimate associates were corrupt. The notable achievement in foreign affairs was the settlement of controversies with Great Britain in the Treaty of London (1871), negotiated by his able Secretary of State, Hamilton Fish.

Nominated for a second term, he defeated Horace Greeley, the Democratic and Liberal Republican candidate, 286 votes to 63. The Panic of 1873 created difficulties for his second term.

After retiring from office, Grant toured Europe for two years and returned in time to accede to a third-term boom, but was beaten in the convention of 1880. Illness and bad business judgment darkened his last years, but he worked steadily at the *Personal Memoirs* which were to be so successful when published after his death at Mount McGregor, near Saratoga, New York, on July 23, 1885. Inarticulate, taciturn, loyal to his friends, he was an able general who should never have accepted the presidency. The standard biographies are by Hesseltine and Woodward.

RUTHERFORD BIRCHARD HAYES

was born at Delaware, Ohio, on October 4, 1822. A graduate of Kenyon College and the Harvard Law School, he practiced law in Sandusky and then in Cincinnati, Ohio. In 1852 he married Lucy Webb. A Whig, he joined the Republican party in 1855. During the Civil War he rose to the rank of major general. He served in Congress from 1865 to 1867 and then confirmed a reputation for honesty and efficiency in two terms as governor of Ohio. His re-election as governor in 1875 made him the logical candidate for those Republicans who wished to stop James G. Blaine in 1876, and he was successfully nominated.

The result of the election was for some time in doubt and hinged upon disputed returns from South Carolina, Louisiana, Florida and Oregon. Samuel J. Tilden, the Democratic candidate, had the larger popular vote but was adjudged by the strictly partisan decisions of the Electoral Commission to have one less electoral vote, 185 to 184. The national acceptance of this result was due in part to the general understanding that Hayes would pursue a conciliatory policy toward the South. He withdrew the troops from the South, took a conservative position on financial and labor issues and urged civil service reform.

Hayes served only one term by his own wish and spent the rest of his life in various humanitarian endeavors. He died in Fremont, Ohio, on January 17, 1893. A hard-working, conscientious, sensible man, Hayes represented the best type of Republican of his day. The standard biographies are by Eckenrode and Williams.

JAMES ABRAHAM GARFIELD,

the last President to be born in a log cabin, was born at Cuyahoga County, Ohio, on November 19, 1831. A Williams graduate, he taught school for a time and entered Republican politics in Ohio. In 1858 he married Lucretia Rudolph. During the Civil War he had a promising career, rising to the rank of major general of volunteers; but in 1863 he was elected to the House of Representatives where he served until 1880. His oratorical and parliamentary abilities soon made him the leading Republican in the House, though his record was marred by his unorthodox acceptance of a fee in the DeGolyer paving contract case and by suspicions of his complicity in the Cr dit Mobilier scandal.

In 1880 Garfield was elected to the Senate, but instead became the presidential candidate on the 36th ballot as a result of a deadlock in the Republican convention. He gained 214 electoral votes to 155 for General Winfield Scott Hancock, the Democratic candidate. Garfield's administration was barely under way when he was shot by Charles J. Guiteau, a disappointed office seeker, in July. He died in Elberon, New Jersey, on September 19, 1881. An attractive and eloquent man, he was much beloved in his day.

The standard biographies are by Smith and Caldwell.

CHESTER ALAN ARTHUR

was born at Fairfield, Vermont, on October 5, 1830. A graduate of Union College, he became a successful New York lawyer. In 1859 he married Ellen Herndon. During the Civil War he held administrative jobs in the Republican state administration and in 1871 was appointed collector of the Port of New York by Grant. This post gave him control over considerable patronage; and, though not personally corrupt, Arthur managed his power in the interests of the New York machine so openly that President Hayes in 1877 called for an investigation, and in 1878 Arthur was suspended from his responsibilities.

In 1880 Arthur was nominated for Vice President in the hope of conciliating the followers of Grant and the powerful New York machine. As President on Garfield's assassination, Arthur, stepping out of his familiar role as spoilsman, backed civil service reform, reorganized the cabinet and prosecuted political associates accused of post office graft. Losing machine support and failing to gain the reformers, he was not renominated. He died in New York City on November 18, 1886. A tall, handsome, dignified man with real administrative abilities, he was a better President than his previous record promised. The standard biography is by Howe.

STEPHEN GROVER CLEVELAND

was born at Caldwell, New Jersey, on March 18, 1837. He was admitted to the bar in Buffalo, New York, in 1859 and lived there as a lawyer, with occasional incursions into Democratic politics, for more than twenty years. He did not participate in the Civil War. As mayor of Buffalo in 1881, he carried through a reform program so ably that the Democrats ran him successfully for governor in 1882. In 1884 he won the Democratic nomination for President. The campaign contrasted Cleveland's spotless public career with the uncertain record of James G. Blaine, the Republican candidate, and Cleveland received enough Mugwump (Independent Republican) support to win by 219 to 182 electoral votes.

As President, Cleveland pushed civil service reform, opposed the pension grab and attacked the high tariff rates. While in the White House he married Frances Folsom (1886). Renominated in 1888, Cleveland was defeated by Benjamin Harrison, polling more popular but fewer electoral votes. In 1892 he was re-elected over Harrison, 277 to 145, with 22 votes for James B. Weaver, the Populist candidate. When the Panic of 1893 burst upon the country, Cleveland's attempts to solve it by sound-money measures alienated the free-silver wing of the party, while his tariff policy alienated the protectionists. In 1894 he sent troops to break the Pullman strike. In foreign affairs his firmness caused Great Britain to back down in the Venezuela border dispute.

In his last years Cleveland was an active and much respected public figure. He died in Princeton, New Jersey, on June 24, 1908. An honest, stubborn, high-principled man, Cleveland was an old-fashioned liberal in the nineteenth-century sense who was baffled by the new problems of industrial society. The standard biographies are by Nevins and McElroy.

BENJAMIN HARRISON

was born in North Bend, Ohio, on August 20, 1833, the grandson of William Henry Harrison. A graduate of Miami University, he took up the law in Indiana and became active in Republican politics. In 1853 he married Caroline Lavinia Scott. During the Civil War he rose to the rank of brigadier general. A sound-money Republican, he was elected senator from Indiana in 1880 and in 1888 received the Republican nomination for President on the 8th ballot. Though behind on the popular vote, he won over Grover Cleveland in the electoral college by 233 to 168.

As President, Benjamin Harrison failed to please either the bosses or the reform element in the party. In foreign affairs he backed Secretary of State Blaine whose policy foreshadowed later American im-

perialism. In 1892 Harrison was renominated, but Cleveland beat him in the election. His wife died in the White House in 1892, and Harrison married her niece, Mary Scott (Lord) Dinmick, in 1896. After his presidency, he resumed law practice. He died in Indianapolis, Indiana, on March 13, 1901. Harrison was an honest man of very medium abilities.

WILLIAM MCKINLEY

was born in Niles, Ohio, on January 29, 1843. A graduate of Allegheny College, he rose from the ranks to become a major in the Civil War. Subsequently he opened a law office in Canton, Ohio, and in 1871 married Ida Saxton. Elected to Congress in 1876, he served there steadily till 1891, except for 1883-85. His faithful advocacy of business interests culminated in the passage of the highly protective McKinley Tariff of 1890. With the support of Mark Hanna, a shrewd Cleveland businessman interested in safeguarding tariff protection, McKinley became governor of Ohio in 1892 and Republican presidential candidate in 1896. The business community, alarmed by the progressivism of William Jennings Bryan, the Democratic candidate, spent considerable money to assure McKinley's victory which was by the margin of 271 to 176 in the electoral college.

The chief event of McKinley's administration was the war with Spain which resulted in our acquisition of the Philippines and other islands. With imperialism as an issue, McKinley defeated Bryan again in the election of 1900 by 292 to 155. On September 6, 1901, he was shot at Buffalo by Leon F. Czolgosz, an anarchist, and he died there on September 14. McKinley was a characteristic Republican politician dedicated to the service of the business community. The standard biography is by Olcott.

THEODORE ROOSEVELT

was born in New York City on October 27, 1858. A Harvard graduate, he was early interested in ranching, in politics and in writing picturesque historical narratives. He was a Republican member of the New York Assembly in 1882-84, an unsuccessful candidate for mayor of New York in 1886, a U. S. Civil Service Commissioner under Harrison, Police Commissioner of New York City in 1895 and Assistant Secretary of the Navy under McKinley in 1897. After exuding a belligerence which helped bring on the war with Spain, he resigned in 1898 to help organize a volunteer regiment named the Rough Riders and take a more direct part in the war. Always publicity-shrewd, he won the New York gubernatorial nomination in 1898 in spite of pronounced lack of enthusiasm on the part of the bosses.

After two years of T.R. in Albany, the New York bosses succeeded in getting him the vice-presidential nomination in 1900. Roosevelt accepted it with reluctance, feeling that his career had been ruined. As President on McKinley's assassination, he perceived the new popular mood of progressivism and initiated a policy of trust busting, designed to control giant corporations. He also strengthened government powers over interstate commerce and launched a conservation program to save natural resources. In foreign affairs he pursued a truculent policy, permitting the instigation of a revolt in Panamá to dispose of Colombian objections to the Panama Canal and helping to maintain the balance of power in the East by bringing the Russo-Japanese war to an end. In 1904 he decisively defeated Alton B. Parker, his conservative Democratic opponent, by an electoral margin of 336 to 140.

Following his second term he went big-game hunting in Africa and toured Europe. On his return to the United States, his increasing coldness toward Taft led him to overlook his earlier disclaimer of third-term ambitions and to re-enter politics. Defeated by the machine in the Republican convention of 1912, he organized the Progressive party and polled more votes than Taft, though the split brought about the election of Wilson. From 1915 on, Roosevelt strongly favored intervention in the European war. He became deeply embittered at Wilson's refusal to allow him to raise a volunteer division. He died in Oyster Bay, New York, on January 6, 1919. He was married twice: in 1880 to Alice Hathaway Lee, who died in 1884; and in 1886 to Edith Kermit Carow.

The athletic advocate of the strenuous life, with his high voice, prominent teeth and thick glasses, Roosevelt captured the imagination of the American people. More sober judgment suggests that, so far as his progressivism was concerned, his bark was worse than his bite, but he was one of the great personalities of American history. The standard biography is by Pringle.

WILLIAM HOWARD TAFT

was born in Cincinnati, Ohio, on September 15, 1857. A Yale graduate, he entered Ohio Republican politics in the eighteen eighties. In 1886 he married Helen Herron. From 1887 to 1890, he served on the Ohio superior court; 1890-92, as solicitor general of the United States; 1892-1900, on the federal circuit court. In 1900 McKinley appointed him president of the Philippine Commission and in 1901 governor general. Taft had great success in pacifying the Filipinos, solving the problem of the church lands, improving economic conditions and establishing limited self-govern-

ment. His period as Secretary of War 1904-08 further demonstrated his capacity as administrator and conciliator; and he was Roosevelt's hand-picked successor in 1908. In the election he polled 321 electoral votes to 162 for William Jennings Bryan.

As President, though he carried on many of Roosevelt's policies, Taft got into increasing trouble with the progressive wing of the party and displayed mounting irritability and indecision. After his defeat in 1912, he became professor of constitutional law at Yale. In 1921 he was appointed Chief Justice of the United States. He died in Washington on March 8, 1930. Enormously large, deliberate and good-humored, Taft excelled as an administrator and judge, not as a political leader.

The standard biography is by Pringle.

THOMAS WOODROW WILSON

was born in Staunton, Virginia, on December 28, 1856. A Princeton graduate, he turned from law practice to post-graduate work in political science at Johns Hopkins University, receiving his Ph.D. in 1886. He taught at Bryn Mawr, Wesleyan and Princeton, and in 1902 was made president of Princeton. After an unsuccessful attempt to democratize the social life of Princeton, he welcomed an invitation in 1910 to be the Democratic gubernatorial candidate in New Jersey. His success in fighting the machine and putting through a reform program attracted national attention.

In 1912, after a protracted contest at Baltimore, Wilson won the Democratic nomination on the 46th ballot. In the election he received 435 electoral votes to 88 for Roosevelt and 8 for Taft. During his first term Wilson proceeded under the standard of the New Freedom to enact a program of domestic reform, including the Federal Reserve Act, the Clayton Anti-trust Act, the establishment of the Federal Trade Commission and other measures designed to restore competition in the face of the great monopolies. In foreign affairs, while privately sympathetic with the Allies, he strove to maintain strict neutrality in the European war and warned both sides against encroachments on American interests.

Re-elected in 1916 as a peace candidate, he tried to mediate between the warring nations; but, when the Germans resumed unrestricted submarine warfare in 1917, Wilson brought the United States into what he now believed was a war to make the world safe for democracy. He supplied the classic formulations of Allied war aims; and the armistice of November, 1918, was negotiated on the basis of Wilson's Fourteen Points. In 1919 he strove at Versailles to lay the foundations for enduring peace.

He accepted the imperfections of the Versailles Treaty in the expectation that they could be remedied by action within the League of Nations. He probably could have secured ratification of the treaty if he had adopted a more conciliatory attitude toward the mild reservationists; but his insistence on all or nothing eventually caused the diehard isolationists and diehard Wilsonites to unite in rejecting a compromise.

In September, 1919, Wilson suffered a paralytic stroke which limited his future activity. After the presidency he lived on in retirement in Washington, dying February 3, 1924. He was married twice—in 1885 to Ellen Louise Axson, who died in 1914, and in 1915 to Edith Bolling Galt. A man of high principle, inspiring eloquence and great intellectual ability, Wilson was the first leader to fire the imagination of the masses of the world with the vision of world peace. The standard biography is by Baker.

WARREN GAMALIEL HARDING

was born in Morrow County, Ohio, on November 2, 1865. After attending Ohio Central College, Harding became interested in journalism and in 1884 bought the *Marion (Ohio) Star*. In 1891 he married a wealthy widow, Florence Kling De Wolfe. As his paper prospered, he entered Republican politics, serving as state senator (1899-1903), and as lieutenant governor (1904-06). In 1910 he was defeated for governor but in 1914 was elected to the Senate. His reputation as orator made him keynoter in the 1916 convention.

When the 1920 Republican convention was deadlocked between Leonard Wood and Frank O. Lowden, Harding was made the dark-horse nominee on his solemn affirmation that there was no reason in his past that he should not be. Straddling the League question, Harding was elected easily, with 404 electoral votes to 127 for James M. Cox, his Democratic opponent. His cabinet contained some able men, but also some manifestly unfit for public office. Harding's own intimates were mediocre when they were not corrupt. The impending disclosure of scandals in the Interior and Justice departments and in the Veterans' Bureau, as well as political setbacks, profoundly worried him. On his return from Alaska in 1923, he died suddenly at San Francisco on August 2. A handsome and genial man, undiscriminating in his associates, lacking in political ideas or fortitude, Harding was totally unfitted for the presidency.

JOHN CALVIN COOLIDGE

was born in Plymouth, Vermont, on July 4, 1872. An Amherst graduate, he went into law practice at Northampton, Massa-

chusetts, in 1897. He married Grace Anna Goodhue in 1905. He entered Republican state politics, becoming successively mayor of Northampton, state senator, lieutenant governor and, in 1919, governor. His conduct in regard to the Boston police strike in 1919 won him a somewhat undeserved reputation for decisive action and brought him the Republican vice-presidential nomination in 1920. After Harding's death Coolidge handled the Washington scandals with care and finally managed to save the Republican party from public blame for the widespread corruption.

In 1924 Coolidge won re-election without difficulty, getting 382 electoral votes to 136 for the Democrat, John W. Davis, and 13 for Robert M. La Follette running on the Progressive ticket. His second term, like his first, was characterized by deference to big business, indifference to the underprivileged and a general satisfaction with the existing economic order. He stated that he did not choose to run in 1928, but he may have hoped to be drafted anyway.

After his presidency, Coolidge lived quietly in Northampton, writing an unilluminating *Autobiography* and conducting a syndicated column. He died in Northampton, Massachusetts, on January 5, 1933. His dry, Yankee humor, his frugality and glumness made him a paradoxically popular President in the boom period. The standard biographies are by White and Fuess.

HERBERT CLARK HOOVER

was born at West Branch, Iowa, an August 10, 1874. A Stanford graduate, he worked from 1895 to 1913 as a mining engineer and consultant in North America, Europe, Asia, Africa and Australia. In 1899 he married Lou Henry. During the First World War he served with distinction as chairman of the American Relief Committee in London, as chairman of the Commission for Relief in Belgium and as United States Food Administrator. His political affiliations were still sufficiently indeterminate for him to be mentioned as a possibility for both Republican and Democratic nominations in 1920; but after the election he served both Harding and Coolidge as Secretary of Commerce.

In the election of 1928 Hoover received 444 electoral votes to 87 for Alfred E. Smith, the Democratic candidate. He soon faced the worst depression in the nation's history; but his attacks upon it were hampered by his devotion to the theory that the forces which brought the crisis would soon bring the revival, and then by his belief that in too many areas the federal government had no power to act. In a succession of vetoes he struck down measures proposing a national employment system or national relief; he reduced in-

come tax rates; and only at the end of his term did he yield to popular pressure and set up agencies to make emergency loans (mostly to large business).

After his defeat in 1932, Hoover occupied himself with private business and with books and speeches attacking the New Deal. President Truman brought him back into official life by charging him in 1946 with various world food missions.

FRANKLIN DELANO ROOSEVELT

was born in Hyde Park, New York, on January 30, 1882. A Harvard graduate, he attended Columbia Law School and was admitted to the New York bar. In 1910 he was elected to the New York state senate as a Democrat. Re-elected in 1912, he was appointed Assistant Secretary of the Navy by Woodrow Wilson in 1913. In 1920 his radiant personality and his war services resulted in his nomination for Vice President as James M. Cox's running mate. After his defeat, he returned to law practice in New York. In August, 1921, Roosevelt was stricken with infantile paralysis while at Campobello, New Brunswick. After a long and gallant fight against the disease he recovered partial use of his legs. In 1924 and 1928 he led the fight at the Democratic national conventions for the nomination of Governor Alfred E. Smith of New York; and in 1928 Roosevelt was himself induced to run for governor of New York. He was elected and was re-elected in 1930.

In 1932 Roosevelt received the Democratic nomination for President and immediately launched a campaign which brought new spirit to a weary and discouraged nation. He won the election over Herbert Hoover by a margin of 472 to 59 in the electoral college. His first term was characterized by an unfolding of the New Deal program, with greater benefits for labor, the farmers and the unemployed, and the progressive estrangement of most of the business community.

At an early stage Roosevelt became aware of the menace to world peace involved in the existence of totalitarian fascism, and from 1937 on he tried to focus public attention on the trend of events in Europe and Asia. As a result he was widely denounced as a warmonger. He was re-elected in 1936 over Alfred M. Landon by the overwhelming electoral margin of 523 to 8; and the gathering international crisis caused him to decide to run again in 1940. He defeated Wendell L. Willkie, 449 to 82.

Roosevelt's program to bring maximum aid to Britain and, after June, 1941, to Russia was bitterly opposed by a small but organized minority, until the Japanese attack on Pearl Harbor restored national unity. During the war Roosevelt shelved the New Deal in the interests of concili-

ating the business community, both in order to get full production during the war and to prepare the way for a united acceptance of the peace settlements after the war. A series of conferences with Winston Churchill and Joseph Stalin laid down the bases for the postwar world. In 1944 he was elected to a fourth term, running against Governor Thomas E. Dewey.

On April 12, 1945, Roosevelt died at Warm Springs, Georgia, shortly after his return from the Yalta Conference. His wife, Anna Eleanor Roosevelt, whom he married in 1905, is a woman of great ability who made significant contributions to her husband's policies. No President has been faced with so many staggering responsibilities, both at home and abroad, as Franklin Roosevelt. His success in bringing America safely through the greatest depression and the greatest war in world history was an accomplishment of the highest statesmanship; and his buoyant, fighting personality has left an indelible impression.

HARRY S. TRUMAN

was born on a farm near Lamar, Missouri, on May 8, 1884. During the First World War he served in France with the 129th Field Artillery. After engaging briefly and unsuccessfully in the haberdashery business in Kansas City, Truman entered local politics. Under the sponsorship of Thomas Pendergast, Democratic boss of Missouri, he held a number of local offices, preserving his personal honesty in the midst of a notoriously corrupt political machine. In 1934 he was elected to the Senate and was re-elected in 1940. During his first term he was a loyal but quiet supporter of the New Deal; but in the course of his second term, an appointment as head of a Senate committee to investigate war production brought out his special qualities of honesty, common sense and hard work, and he won widespread respect.

Nominated as Democratic candidate for Vice President in 1944, Truman became President on Roosevelt's death and immediately found himself confronted with complex postwar problems, both at home and abroad. His first efforts at solution were not markedly successful, and in 1946, the Republicans captured the Congress. The last two years of his first term, though handicapped by persistent congressional opposition, were distinguished by such proposals as the Marshall Plan and the Civil Rights program; and Truman's general record was held in the popular judgment to compare favorably with that of the Republican Congress. Following a campaign in which Truman revealed himself as a militant champion of New Deal principles, he won re-election over Governor Thomas E. Dewey, of New York, in a stunning political upset.

Presidents and Vice Presidents of the U. S.

Presidents & (parties) ¹	Born	State of birth	Died	Term	Age at inaug.	Age at death	Vice Presidents ²
1. Washington (F) ³	Feb. 22, 1732	Va.	Dec. 14, 1799	1789-1797	57	67	1. John Adams
2. J. Adams (F)	Oct. 30, 1735	Mass.	July 4, 1826	1797-1801	61	90	2. Thomas Jefferson ⁴
3. Jefferson (D-R)	Apr. 13, 1743	Va.	July 4, 1826	1801-1809	57	83	3. Aaron Burr
4. Madison (D-R)	Mar. 16, 1751	Va.	June 28, 1836	1809-1817	57	85	4. George Clinton
5. Monroe (D-R)	Apr. 28, 1758	Va.	July 4, 1831	1817-1825	58	73	George Clinton ⁵
6. J. Q. Adams (D-R)	July 11, 1767	Mass.	Feb. 23, 1848	1825-1829	57	80	5. Elbridge Gerry ⁶
7. Jackson (D)	Mar. 15, 1767	S. C.	June 8, 1845	1829-1837	61	78	6. Daniel D. Tompkins
8. Van Buren (D)	Dec. 5, 1782	N. Y.	July 24, 1862	1837-1841	54	79	7. John C. Calhoun
9. W. H. Harrison (W) ⁸	Feb. 9, 1773	Va.	Apr. 4, 1841	1841-1841	68	68	John C. Calhoun ⁷
10. Tyler (W)	Mar. 29, 1790	Va.	Jan. 18, 1862	1841-1845	51	71	8. Martin Van Buren
11. Polk (D)	Nov. 2, 1795	N. C.	June 15, 1849	1845-1849	49	53	9. Richard M. Johnson
12. Taylor (W) ⁹	Nov. 24, 1784	Va.	July 9, 1850	1849-1850	64	65	10. John Tyler
13. Fillmore (W)	Jan. 7, 1800	N. Y.	Mar. 8, 1874	1850-1853	50	74	11. George M. Dallas
14. Pierce (D)	Nov. 23, 1804	N. H.	Oct. 8, 1869	1853-1857	48	64	12. Millard Fillmore
15. Buchanan (D)	Apr. 23, 1791	Pa.	June 1, 1868	1857-1861	65	77	13. William R. King ¹⁰
16. Lincoln (R) ¹⁰	Feb. 12, 1809	Ky.	Apr. 15, 1865	1861-1865	52	56	14. John C. Breckinridge
17. Johnson (R)	Dec. 29, 1808	N. C.	July 31, 1875	1865-1869	56	66	15. Hannibal Hamlin
18. Grant (R)	Apr. 27, 1822	Ohio	July 23, 1885	1869-1877	46	63	16. Andrew Johnson
19. Hayes (R)	Oct. 4, 1822	Ohio	Jan. 17, 1893	1877-1881	54	70	17. Schuyler Colfax
20. Garfield (R) ¹²	Nov. 19, 1831	Ohio	Sept. 19, 1881	1881-1881	49	49	18. Henry Wilson ¹¹
21. Arthur (R)	Oct. 5, 1830	Vt.	Nov. 18, 1886	1881-1885	50	56	19. William A. Wheeler
22. Cleveland (D)	Mar. 18, 1837	N. J.	June 24, 1908	1885-1889	47	71	20. Chester A. Arthur
23. B. Harrison (R)	Aug. 20, 1833	Ohio	Mar. 13, 1901	1889-1893	55	67	21. Thomas A. Hendricks ¹²
24. McKinley (R) ¹⁵	Jan. 29, 1843	Ohio	Sept. 14, 1901	1897-1901	54	58	22. Levi P. Morton
25. T. Roosevelt (R)	Oct. 27, 1858	N. Y.	Jan. 6, 1919	1901-1909	42	60	23. Adlai E. Stevenson
26. Taft (R)	Sept. 15, 1857	Ohio	Mar. 8, 1930	1909-1913	51	72	24. Garret A. Hobart ¹⁶
27. Wilson (D)	Dec. 28, 1856	Va.	Feb. 3, 1924	1913-1921	56	67	25. Theodore Roosevelt
28. Harding (R) ⁸	Nov. 2, 1865	Ohio	Aug. 2, 1923	1921-1923	55	57	26. Charles W. Fairbanks
29. Coolidge (R)	July 4, 1872	Vt.	Jan. 5, 1933	1923-1929	51	60	27. James S. Sherman ¹⁷
30. Hoover (R)	Aug. 10, 1874	Iowa		1929-1933	54		28. Thomas R. Marshall
31. F. D. Roosevelt (D) ⁸	Jan. 30, 1882	N. Y.	Apr. 12, 1945	1933-1945	51	63	29. Calvin Coolidge
32. Truman (D)	May 8, 1884	Mo.		1945-	60		30. Charles G. Dawes
							31. Charles Curtis
							32. John N. Garner
							33. Henry A. Wallace
							34. Harry S. Truman
							35. Alben W. Barkley

¹ F—Federalist; D—R—Democratic-Republican; D—Democratic; W—Whig; R—Republican. ² Same party as President, except Jefferson. ³ No party for first election. The party system in the U. S. made its appearance during Washington's first term. ⁴ Democratic-Republican. Only Vice President of different party from President. ⁵ Died in office Apr. 20, 1812. ⁶ Died in office Nov. 23, 1814. ⁷ Resigned Dec. 28, 1832, to become U. S. Senator. ⁸ Died in office. ⁹ Died in office Apr. 18, 1853. ¹⁰ Died in office (shot Apr. 14 by John Wilkes Booth). ¹¹ Died in office Nov. 22, 1875. ¹² Died in office (shot July 2 by Charles J. Guiteau). ¹³ Died in office Nov. 25, 1885. ¹⁴ Cleveland, in the second of his nonconsecutive terms, is sometimes considered the 24th President, McKinley the 25th and so on to Truman, the 33rd President with such a system of counting. ¹⁵ Died in office (shot Sept. 6 by Leon F. Czolgosz). ¹⁶ Died in office Nov. 21, 1899. ¹⁷ Died in office Oct. 30, 1912.

The Proposed Twenty-Second Amendment

On Mar. 21, 1947, Congress approved and sent to the states a proposal for a 22nd amendment to the Constitution, which would limit to two the number of terms which any person could serve as President of the U. S. However, the proposal says that this limitation "shall not apply to any person holding the office of President when this Article was proposed by the Congress, and shall not prevent any person who may be holding the office of President, or acting as President, during the term within which this Article becomes operative from holding

the office of President or acting as President during the remainder of such term."

To become an amendment, the proposal must be ratified by three-quarters of the states within 7 years after its submission to the states. Twenty-four states had ratified it as of Sept., 1950: California, Colorado, Connecticut, Delaware, Illinois, Iowa, Kansas, Louisiana, Maine (first to ratify), Michigan, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Vermont, Virginia, Wisconsin.

Wives of the Presidents of the United States

President	Wife's name	Year and place of birth	Married	Died	Sons	Daughters
Washington	Mrs. Martha Dandridge Custis	1732, Va.	1759	1802	..	..
John Adams	Abigail Smith	1744, Mass.	1764	1818	3	2
Jefferson	Mrs. Martha Wayles Skelton	1748, Va.	1772	1782	1	5
Madison	Mrs. Dorothy "Dolly" Payne Todd	1772, N. C.	1794	1849	..	..
Monroe	Eliza Kortright	1768, N. Y.	1786	1830	..	2
J. Q. Adams	Louisa Catherine Johnson	1775, England	1797	1852	3	1
Jackson	Mrs. Rachel Donelson Robards	1767, Va.	1791	1828	..	..
Van Buren	Hannah Hoes	1783, N. Y.	1807	1819	4	..
W. H. Harrison	Anna Symmes	1775, N. J.	1795	1864	6	4
Tyler	Letitia Christian	1790, Va.	1813	1842	3	4
	Julia Gardiner	1820, N. Y.	1844	1889	5	2
Polk	Sarah Childress	1803, Tenn.	1824	1891	..	..
Taylor	Margaret Smith	1788, Md.	1810	1852	1	5
Fillmore	Abigail Powers	1798, N. Y.	1826	1853	1	1
	Mrs. Caroline Carmichael McIntosh	1813, N. J.	1858	1881	..	..
Pierce	Jane Means Appleton	1806, N. H.	1834	1863	3	..
Buchanan	(Unmarried)	....	....	....	..	..
Lincoln	Mary Todd	1818, Ky.	1842	1882	4	..
Johnson	Eliza McCardle	1810, Tenn.	1827	1876	3	2
Grant	Julia Dent	1826, Mo.	1848	1902	3	1
Hayes	Lucy Ware Webb	1831, Ohio	1852	1889	7	1
Garfield	Lucretia Rudolph	1832, Ohio	1858	1918	5	2
Arthur	Ellen Lewis Herndon	1837, Va.	1859	1880	2	1
Cleveland	Frances Folsom	1864, N. Y.	1886	1947	2	3
B. Harrison	Caroline Lavinia Scott	1832, Ohio	1853	1892	1	1
	Mrs. Mary Scott Lord Dimmick	1858, Pa.	1896	1948	..	1
McKinley	Ida Saxton	1847, Ohio	1871	1907	..	2
T. Roosevelt	Alice Hathaway Lee	1861, Mass.	1880	1884	..	1
	Edith Kermit Carow	1861, Conn.	1886	1948	4	1
Taft	Helen Herron	1861, Ohio	1886	1943	2	1
Wilson	Ellen Louise Axson	1860, Ga.	1885	1914	..	3
	Mrs. Edith Bolling Galt	1872, Va.	1915	....	..	..
Harding	Mrs. Florence Kling DeWolfe	1860, Ohio	1891	1924	..	..
Coolidge	Grace Anna Goodhue	1879, Vt.	1905	....	2	..
Hoover	Lou Henry	1875, Iowa	1899	1944	2	..
F. D. Roosevelt	Anna Eleanor Roosevelt	1884, N. Y.	1905	....	5	1
Truman	Bess Wallace	1885, Mo.	1919	....	..	1

National Committee Chairmen Since 1916

Source: Republican and Democratic National Committees.

Chairman and (state)	Term	Chairman and (state)	Term
Republican		Republican (Contd.)	
William R. Willcox (N. Y.)	1916-18	Guy G. Gabrielson (N. J.)	1949-
Will Hays (Ind.)	1918-21		
John T. Adams (Iowa)	1921-24	Democratic	
William M. Butler (Mass.)	1924-28	Vance McCormick (Pa.)	1916-19
Hubert Work (Colo.)	1928-29	Homer Cummings (Conn.)	1919-20
Claudius H. Huston (Tenn.)	1929-30	George White (Ohio)	1920-21
Simeon D. Fess (Ohio)	1930-32	Cordell Hull (Tenn.)	1921-24
Everett Sanders (Ind.)	1932-34	Clem Shaver (W. Va.)	1924-28
Henry P. Fletcher (Pa.)	1934-36	John J. Raskob (N. Y.)	1928-32
John Hamilton (Kans.)	1936-40	James A. Farley (N. Y.)	1932-40
Joseph W. Martin, Jr. (Mass.)	1940-42	Edward J. Flynn (N. Y.)	1940-43
Harrison E. Spangler (Iowa)	1942-44	Frank C. Walker (Mont.)	1943-44
Herbert Brownell, Jr. (N. Y.)	1944-46	Robert E. Hannegan (Mo.)	1944-47
Carroll Reece (Tenn.)	1946-48	J. Howard McGrath (R. I.)	1947-49
Hugh D. Scott, Jr. (Pa.)	1948-49	William M. Boyle, Jr. (Mo.)	1949-

To find the year of the first session of a certain Congress, double the number of the Congress and add 1787. To find which

Congress was holding its first session in any odd year, subtract 1787 from the year and divide by 2.

The Executive Departments

Adapted from *Congressional Directory* and *U. S. Government Organization Manual*.

STATE. The Secretary of State has the principal responsibility, under the President, for the determination of the policy of the government in relation to international problems. He is charged with the conduct of negotiations pertaining to the protection of American rights and interests throughout the world, and the promotion of beneficial intercourse between the United States and other countries. He also performs certain domestic duties, such as having custody of the seal of the United States and publishing the laws enacted by Congress.

A Department of Foreign Affairs was established in 1781 and was reconstituted July 27, 1789, following adoption of the Constitution. The name was changed Sept. 15, 1789, to the Department of State.

TREASURY. The Secretary of the Treasury is charged by law with the management of the national finances. He superintends the collection of the revenue; grants warrants for money drawn from the Treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; directs the forms of keeping and rendering public accounts; prepares plans for the improvement of the revenue and for the support of the public credit; and submits a report annually to Congress on the condition of the public finances, and the results of activities under his supervision, which include, among others, the coinage and printing of money, and the administration of the Coast Guard, Narcotics and Secret Services.

The Department of the Treasury was created Sept. 2, 1789.

DEFENSE. The Secretary of Defense is responsible for supporting and defending the Constitution against all enemies, either foreign or domestic, and maintaining, by timely and effective military action, the security of the United States and its possessions and areas vital to its interest. He is charged with advancing the national policies and interests of the United States, and with safeguarding internal security as directed by higher authority. For these purposes, he may conduct integrated military operations on the land, on the sea, and in the air.

On July 26, 1947, the National Military Establishment was created by the National Security Act of 1947. The name was changed Aug. 10, 1949, to the Department of Defense. Subordinate to the Secretary of Defense are the Secretaries of the Army, of the Navy, and of the Air Force. These three Secretaries have neither Cabinet rank nor direct access to the President.

JUSTICE. The Attorney General is the chief law officer of the Federal Government. He represents the United States in legal matters generally and gives advice and opinions when requested by the President or by the heads of the executive departments. He appears in the Supreme Court in cases of exceptional importance, exercises general superintendence over United States district attorneys and marshals in the various judicial districts, and provides special counsel for the United States when the character of the interests involved requires such action. The Federal Bureau of Investigation and the Bureau of Prisons are under his direction.

The office of Attorney General was created Sept. 24, 1789. Although he was one of the original Cabinet members, he was not head of a department until June 22, 1870, when the Department of Justice was created.

POST OFFICE. The Postmaster General is executive head of the Postal Service. Subject to approval of the President, he makes postal treaties with foreign governments.

The office of Postmaster General and a temporary post office system were created Sept. 22, 1789. The first detailed provisions for a department were made Feb. 20, 1792, and later legislation developed the Postal System. The Postmaster General did not become a Cabinet member until 1829, and the department did not receive executive status until June 8, 1872.

INTERIOR. The Secretary of the Interior has the primary task of developing and conserving the natural resources of the United States and its territories for this and future generations. He is charged with the supervision of public business relating to such offices as the General Land Office, Bureau of Reclamation, Geological Survey, Office of Indian Affairs, National Park Service, Bureau of Mines, Division of Territories and Island Possessions, etc.

The Department of the Interior was created Mar. 3, 1849.

AGRICULTURE. The Secretary of Agriculture is charged with acquiring and diffusing among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of the term. For that purpose he conducts a comprehensive research and educational program. He is also required to administer many other Federal laws which relate to marketing and distribution of agricultural products; the regulation of interstate commerce in food, fiber and related products; the protection

and management of the national forests, farm credit, agricultural adjustment, conservation and land use, farm tenancy, and rural rehabilitation and electrification.

The Department of Agriculture was created May 15, 1862, and administered by a Commissioner of Agriculture until Feb. 9, 1889, when it was made an executive department and the office of Secretary was created.

COMMERCE. The Secretary of Commerce directs such activities as population, agriculture and other censuses; collection, analysis and dissemination of commercial statistics; promotion of foreign and domestic commerce; coastal and geodetic surveys; establishment of commodity weights, measures, and standards; supervision of the issuance of patents and the registration of trade-marks; maintenance of aids to air navigation; development of inland waterway transportation.

On Mar. 4, 1913, all labor activities were transferred out of the Department of Commerce and Labor, and it was renamed the Department of Commerce.

Earlier Departments

WAR. The War Department was created Aug. 7, 1789, to succeed a similar department established before the adoption of the Constitution. Its activities were placed under the Department of Defense on July 26, 1947.

NAVY. On April 7, 1789, the conduct of naval affairs was placed under the War De-

LABOR. The Secretary of Labor is charged with the duty of fostering, promoting and developing the welfare of the wage earners of the United States, improving their working conditions, and advancing their opportunities for profitable employment. He has the power to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in his judgment the interests of industrial peace may require it to be done. He directs the collection and collation of statistics concerning conditions of labor; the promulgation and enforcement of certain maximum hour, minimum wage, child labor, safety and health stipulations in connection with Government supply contracts; the investigation of matters pertaining to children.

A Bureau of Labor was created in 1884 under the Department of the Interior, and it later became an independent department without executive rank. It was returned to bureau status in the Department of Commerce and Labor, but on Mar. 4, 1913, it became an independent executive department under its present name.

partment, but on April 30, 1798, the Department of the Navy was created. Its activities were placed under the Department of Defense on July 26, 1947.

COMMERCE AND LABOR. The Department of Commerce and Labor was created Feb. 14, 1903, and divided Mar. 4, 1913, into two separate departments.

Presidential Succession

Under the Constitution, the Vice President is next in line for the Presidency; and, according to the Presidential Succession Act of 1886, the Vice President was to be followed by the Secretary of State, Secretary of the Treasury, Secretary of War, Attorney General, Postmaster General, Secretary of the Navy, and Secretary of the Interior in that order, provided they were constitutionally eligible. The Secretaries of Agriculture, Commerce and Labor were not included since their posts had not yet been created.

On July 18, 1947, President Truman

signed a bill making the Speaker of the House next in line after the Vice President, to be followed by the Senate President pro tempore provided both are constitutionally eligible. They are followed by the Cabinet members in the same order as provided by the Act of 1886, with the Secretaries of Agriculture, Commerce and Labor added in that order after the Secretary of the Interior. Under the National Security Act of 1947, signed July 26, 1947, the new Secretary of Defense, replacing the Secretaries of War and the Navy, is third in the succession line in the Cabinet.

Presidents and Congresses Coincident With Terms

President	Congresses	President	Congresses	President	Congresses	President	Congresses
Washington.....	1-4	W. H. Harrison.....	27	Johnson.....	39-40	T. Roosevelt.....	57-60
Adams.....	5-6	Tyler.....	27-28	Grant.....	41-44	Taft.....	61-62
Jefferson.....	7-10	Polk.....	29-30	Hayes.....	45-46	Wilson.....	63-66
Madison.....	11-14	Taylor.....	31	Garfield.....	47	Harding.....	67
Monroe.....	15-18	Fillmore.....	31-32	Arthur.....	47-48	Coolidge.....	68-70
J. Q. Adams.....	19-20	Pierce.....	33-34	Cleveland.....	49-50, 53-54	Hoover.....	71-72
Jackson.....	21-24	Buchanan.....	35-36	B. Harrison.....	51-52	F. D. Roosevelt.....	73-79
Van Buren.....	25-26	Lincoln.....	37-39	McKinley.....	55-57	Truman.....	79-

U. S. Cabinet Members with Dates of Appointment

Although the Constitution made no provision for a President's advisory group, the heads of the three executive departments (State, Treasury and War) and the Attorney General were organized by Washington into such a group; and by about 1793, the name "Cabinet" was applied to it. With the exception of the Attorney General up to 1870 and the Postmaster General from 1829-72, Cabinet members have been heads of executive departments, although other government officials may be called to sit in whenever necessary.

A Cabinet member is appointed by the President, subject to the confirmation of the Senate; and as his term is not fixed, he may be replaced at any time by the

President. At a change in Administration, it is customary for him to tender his resignation, but he remains in office until a successor is appointed.

The table of Cabinet members lists only those members who actually served after being duly commissioned. It does not include ad-interim appointments or cases where the appointee declined the office after appointment.

The dates shown are those of appointment. "Contd" indicates that the term continued from the previous Administration for a substantial amount of time. Those cases where the term continued for only a few days, until a new appointment could be made, are not indicated.

WASHINGTON		Attorney General		Secretary of the Navy		Secretary of the Navy	
Secretary of State		Levi Lincoln.....	1801	B. W. Crowninshield..	Contd	John Branch.....	1829
Thomas Jefferson.....	1789	Robert Smith.....	1805	Smith Thompson.....	1818	Levi Woodbury.....	1831
Edmund Randolph.....	1794	John Breckinridge....	1805	Samuel L. Southard... 1823		Mahlon Dickerson....	1834
Timothy Pickering.....	1795	Caesar A. Rodney.....	1807				
Secretary of the Treasury		Secretary of the Navy		J. Q. ADAMS		VAN BUREN	
Alexander Hamilton....	1789	Benjamin Stoddert... Contd		Secretary of State		Secretary of State	
Oliver Wolcott, Jr.....	1795	Robert Smith.....	1801	Henry Clay.....	1825	John Forsyth.....	Contd
Secretary of War		MADISON		Secretary of the Treasury		Secretary of the Treasury	
Henry Knox.....	1789	Secretary of State		Richard Rush.....	1825	Levi Woodbury.....	Contd
Timothy Pickering.....	1795	Secretary of State		Secretary of War		Secretary of War	
James McHenry.....	1796	Robert Smith.....	1809	James Barbour.....	1825	Joel R. Poinsett.....	1837
		James Monroe.....	1811	Peter B. Porter.....	1828		
Attorney General		Secretary of the Treasury		Attorney General		Attorney General	
Edmund Randolph.....	1789	Albert Gallatin.....	Contd	William Wirt.....	Contd	Benjamin F. Butler... Contd	
William Bradford.....	1794	George W. Campbell....	1814			Felix Grundy.....	1838
Charles Lee.....	1795	Alexander J. Dallas....	1814	Secretary of the Navy		Henry D. Gilpin.....	1840
		William H. Crawford....	1816	Samuel L. Southard... Contd			
J. ADAMS		Secretary of War		JACKSON		Postmaster General	
Secretary of State		William Eustis.....	1809	Secretary of State		Amos Kendall.....	Contd
Timothy Pickering.... Contd		John Armstrong.....	1813	Martin Van Buren....	1829	John M. Niles.....	1840
John Marshall.....	1800	James Monroe.....	1814	Edward Livingston....	1831		
		William H. Crawford....	1815	Louis McLane.....	1833	Secretary of the Navy	
Secretary of the Treasury		Attorney General		John Forsyth.....	1834	Mahlon Dickerson.... Contd	
Oliver Wolcott, Jr.....	Contd	Caesar A. Rodney.... Contd				James K. Paulding....	1838
Samuel Dexter.....	1801	William Pinckney.....	1811	Secretary of the Treasury			
Secretary of War		Richard Rush.....	1814	Samuel D. Ingham....	1829	Secretary of State	
James McHenry.....	Contd	Secretary of the Navy		Louis McLane.....	1831	Daniel Webster.....	1841
Samuel Dexter.....	1800	Paul Hamilton.....	1809	William J. Duane.....	1833		
Attorney General		William Jones.....	1813	Roger B. Taney.....	1833	Secretary of the Treasury	
Charles Lee.....	Contd	B. W. Crowninshield... 1814		Levi Woodbury.....	1834	Thomas Ewing.....	1841
Secretary of the Navy		MONROE				Secretary of War	
Benjamin Stoddert....	1798	Secretary of State		Secretary of War		John Bell.....	1841
JEFFERSON		John Quincy Adams....	1817	Lewis Cass.....	1831		
Secretary of State		Secretary of the Treasury		Attorney General		Attorney General	
James Madison.....	1801	William H. Crawford.. Contd		John M. Berrien.....	1829	John J. Crittenden....	1841
Secretary of the Treasury		Secretary of War		Roger B. Taney.....	1831	Postmaster General	
Samuel Dexter.....	Contd	John C. Calhoun.....	1817	Benjamin F. Butler... 1833		Francis Granger.....	1841
Albert Gallatin.....	1801	Attorney General		Postmaster General			
Secretary of War		Richard Rush.....	Contd	William T. Barry.....	1829	Secretary of the Navy	
Henry Dearborn.....	1801	William Wirt.....	1817	Amos Kendall.....	1835	George E. Badger.....	1841

TYLER

Secretary of State

Daniel Webster..... Contd
Abel P. Upshur..... 1843
John C. Calhoun..... 1844

Secretary of the Treasury

Thomas Ewing..... Contd
Walter Forward..... 1841
John C. Spencer..... 1843
George M. Bibb..... 1844

Secretary of War

John Bell..... Contd
John C. Spencer..... 1841
James M. Porter..... 1843
William Wilkins..... 1844

Attorney General

John J. Crittenden..... Contd
Hugh S. Legare..... 1841
John Nelson..... 1843

Postmaster General

Francis Granger..... Contd
Charles A. Wickliffe..... 1841

Secretary of the Navy

George E. Badger..... Contd
Abel P. Upshur..... 1841
David Henshaw..... 1843
Thomas W. Gilmer..... 1844
John Y. Mason..... 1844

POLK

Secretary of State

James Buchanan..... 1845

Secretary of the Treasury

Robert J. Walker..... 1845

Secretary of War

William L. Marcy..... 1845

Attorney General

John Y. Mason..... 1845
Nathan Clifford..... 1846
Isaac Toucey..... 1848

Postmaster General

Cave Johnson..... 1845

Secretary of the Navy

George Bancroft..... 1845
John Y. Mason..... 1846

TAYLOR

Secretary of State

John M. Clayton..... 1849

Secretary of the Treasury

William M. Meredith... 1849

Secretary of War

George W. Crawford.... 1849

Attorney General

Reverdy Johnson..... 1849

Postmaster General

Jacob Collamer..... 1849

Secretary of the Navy

William B. Preston..... 1849

Secretary of the Interior

Thomas Ewing..... 1849

FILLMORE

Secretary of State

Daniel Webster..... 1850
Edward Everett..... 1852

Secretary of the Treasury

Thomas Corwin..... 1850

Secretary of War

Charles M. Conrad..... 1850

Attorney General

John J. Crittenden..... 1850

Postmaster General

Nathan K. Hall..... 1850
Samuel D. Hubbard.... 1852

Secretary of the Navy

William A. Graham.... 1850
John P. Kennedy..... 1852

Secretary of the Interior

Thos. M. T. McKennon. 1850
Alex. H. H. Stuart..... 1850

PIERCE

Secretary of State

William L. Marcy..... 1853

Secretary of the Treasury

James Guthrie..... 1853

Secretary of War

Jefferson Davis..... 1853

Attorney General

Caleb Cushing..... 1853

Postmaster General

James Campbell..... 1853

Secretary of the Navy

James C. Dobbin..... 1853

Secretary of the Interior

Robert McClelland.... 1853

BUCHANAN

Secretary of State

Lewis Cass..... 1857
Jeremiah S. Black.... 1860

Secretary of the Treasury

Howell Cobb..... 1857
Philip F. Thomas..... 1860
John A. Dix..... 1861

Secretary of War

John B. Floyd..... 1857
Joseph Holt..... 1861

Attorney General

Jeremiah S. Black.... 1857
Edwin M. Stanton..... 1860

Postmaster General

Aaron V. Brown..... 1857
Joseph Holt..... 1859
Horatio King..... 1861

Secretary of the Navy

Isaac Toucey..... 1857

Secretary of the Interior

Jacob Thompson..... 1857

LINCOLN

Secretary of State

William H. Seward..... 1861

Secretary of the Treasury

Salmon P. Chase..... 1861
William P. Fessenden.. 1864
Hugh McCulloch..... 1865

Secretary of War

Simon Cameron..... 1861
Edwin M. Stanton..... 1862

Attorney General

Edward Bates..... 1861
James Speed..... 1864

Postmaster General

Montgomery Blair.... 1861
William Dennison..... 1864

Secretary of the Navy

Gideon Welles..... 1861

Secretary of the Interior

Caleb B. Smith..... 1861
John P. Usher..... 1863

JOHNSON

Secretary of State

William H. Seward.... Contd

Secretary of the Treasury

Hugh McCulloch..... Contd

Secretary of War

Edwin M. Stanton.... Contd
John M. Schofield..... 1868

Attorney General

James Speed..... Contd
Henry Stanbery..... 1866
William M. Evarts..... 1868

Postmaster General

William Dennison.... Contd
Alexander W. Randall.. 1866

Secretary of the Navy

Gideon Welles..... Contd

Secretary of the Interior

John P. Usher..... Contd
James Harlan..... 1865
Orville H. Browning... 1866

GRANT

Secretary of State

Elihu B. Washburne... 1869
Hamilton Fish..... 1869

Secretary of the Treasury

George S. Boutwell... 1869
William A. Richardson.. 1873
Benjamin H. Bristow... 1874
Lot M. Morrill..... 1876

Secretary of War

John A. Rawlins..... 1869
William T. Sherman.... 1869
William W. Belknap.... 1869
Alphonso Taft..... 1876
James D. Cameron..... 1876

Attorney General

Ebenezer R. Hoar..... 1869
Amos T. Akerman..... 1870
George H. Williams.... 1871
Edwards Pierpont.... 1875
Alphonso Taft..... 1876

Postmaster General

John A. J. Creswell... 1869
James W. Marshall..... 1874
Marshall Jewell..... 1874
James N. Tyner..... 1876

Secretary of the Navy

Adolph E. Borie..... 1869
George M. Robeson.... 1869

Secretary of the Interior

Jacob D. Cox..... 1869
Columbus Delano..... 1870
Zachariah Chandler... 1875

HAYES

Secretary of State

William M. Evarts.... 1877

Secretary of the Treasury

John Sherman..... 1877

Secretary of War

George W. McCrary... 1877
Alexander Ramsey..... 1879

Attorney General

Charles Devens..... 1877

Postmaster General

David M. Key..... 1877
Horace Maynard..... 1880

Secretary of the Navy

Richard W. Thompson.. 1877
Nathan Goff, Jr..... 1881

Secretary of the Interior

Carl Schurz..... 1877

GARFIELD

Secretary of State

James G. Blaine..... 1881

Secretary of the Treasury

William Windom..... 1881

Secretary of War

Robert T. Lincoln.... 1881

Attorney General

Wayne MacVeagh..... 1881

Postmaster General

Thomas L. James..... 1881

Secretary of the Navy

William H. Hunt..... 1881

Secretary of the Interior

Samuel J. Kirkwood... 1881

ARTHUR

Secretary of State

James G. Blaine..... Contd
F. T. Frelinghuysen..... 1881

Secretary of the Treasury

William Windom..... Contd
Charles J. Folger..... 1881
Walter Q. Gresham..... 1884
Hugh McCulloch..... 1884

Secretary of War

Robert T. Lincoln..... Contd

Attorney General

Wayne MacVeagh..... Contd
Benjamin H. Brewster..... 1881

Postmaster General

Thomas L. James..... Contd
Timothy O. Howe..... 1881
Walter Q. Gresham..... 1883
Frank Hatton..... 1884

Secretary of the Navy

William H. Hunt..... Contd
William E. Chandler..... 1882

Secretary of the Interior

Samuel J. Kirkwood..... Contd
Henry M. Teller..... 1882

CLEVELAND

Secretary of State

Thomas F. Bayard..... 1885

Secretary of the Treasury

Daniel Manning..... 1885
Charles S. Fairchild..... 1887

Secretary of War

William C. Endicott..... 1885

Attorney General

Augustus H. Garland..... 1885

Postmaster General

William F. Vilas..... 1885
Don M. Dickinson..... 1888

Secretary of the Navy

William C. Whitney..... 1885

Secretary of the Interior

Lucius Q. C. Lamar..... 1885
William F. Vilas..... 1888

Secretary of Agriculture

Norman J. Colman..... 1889

HARRISON

Secretary of State

James G. Blaine..... 1889
John W. Foster..... 1892

Secretary of the Treasury

William Windom..... 1889
Charles Foster..... 1891

Secretary of War

Redfield Proctor..... 1889
Stephen B. Elkins..... 1891

Attorney General

William H. H. Miller..... 1889

Postmaster General

John Wanamaker..... 1889

Secretary of the Navy

Benjamin F. Tracy..... 1889

Secretary of the Interior

John W. Noble..... 1889

Secretary of Agriculture

Jeremiah M. Rusk..... 1889

CLEVELAND

Secretary of State

Walter Q. Gresham..... 1893
Richard Olney..... 1895

Secretary of the Treasury

John G. Carlisle..... 1893

Secretary of War

Daniel S. Lamont..... 1893

Attorney General

Richard Olney..... 1893
Judson Harmon..... 1895

Postmaster General

Wilson S. Bissell..... 1893
William L. Wilson..... 1895

Secretary of the Navy

Hilary A. Herbert..... 1893

Secretary of the Interior

Hoke Smith..... 1893
David R. Francis..... 1896

Secretary of Agriculture

Julius Sterling Morton..... 1893

McKINLEY

Secretary of State

John Sherman..... 1897
William R. Day..... 1898
John Hay..... 1898

Secretary of the Treasury [j]

Lyman J. Gage..... 1897

Secretary of War

Russell A. Alger..... 1897
Elihu Root..... 1899

Attorney General

Joseph McKenna..... 1897
John W. Griggs..... 1898
Philander C. Knox..... 1901

Postmaster General

James A. Gary..... 1897
Charles E. Smith..... 1898

Secretary of the Navy

John D. Long..... 1897

Secretary of the Interior

Cornelius N. Bliss..... 1897
Ethan A. Hitchcock..... 1898

Secretary of Agriculture

James Wilson..... 1897

T. ROOSEVELT

Secretary of State

John Hay..... Contd
Elihu Root..... 1905
Robert Bacon..... 1909

Secretary of the Treasury

Lyman J. Gage..... Contd
Leslie M. Shaw..... 1902
George B. Cortelyou..... 1907

Secretary of War

Elihu Root..... Contd
William H. Taft..... 1904
Luke E. Wright..... 1908

Attorney General

Philander C. Knox..... Contd
William H. Moody..... 1904
Charles J. Bonaparte..... 1906

Postmaster General

Charles E. Smith..... Contd
Henry C. Payne..... 1902
Robert J. Wynne..... 1904
George B. Cortelyou..... 1905
George von L. Meyer..... 1907

Secretary of the Navy

John D. Long..... Contd
William H. Moody..... 1902
Paul Morton..... 1904
Charles J. Bonaparte..... 1905
Victor H. Metcalf..... 1906
Truman H. Newberry..... 1908

Secretary of the Interior

Ethan A. Hitchcock..... Contd
James R. Garfield..... 1907

Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce
and Labor

George B. Cortelyou..... 1903
Victor H. Metcalf..... 1904
Oscar S. Straus..... 1906

TAFT

Secretary of State

Philander C. Knox..... 1909

Secretary of the Treasury

Franklin MacVeagh..... 1909

Secretary of War

Jacob M. Dickinson..... 1909
Henry L. Stimson..... 1911

Attorney General

George W. Wickersham..... 1909

Postmaster General

Frank H. Hitchcock..... 1909

Secretary of the Navy

George von L. Meyer..... 1909

Secretary of the Interior

Richard A. Ballinger..... 1909
Walter L. Fisher..... 1911

Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce
and Labor

Charles Nagel..... 1909

WILSON

Secretary of State

William J. Bryan..... 1913
Robert Lansing..... 1915
Bainbridge Colby..... 1920

Secretary of the Treasury

William G. McAdoo..... 1913
Carter Glass..... 1918
David F. Houston..... 1920

Secretary of War

Lindley M. Garrison..... 1913
Newton D. Baker..... 1916

Attorney General

James C. McReynolds..... 1913
Thomas W. Gregory..... 1914
A. Mitchell Palmer..... 1919

Postmaster General

Albert S. Burleson..... 1913

Secretary of the Navy

Josephus Daniels..... 1913

Secretary of the Interior

Franklin K. Lane..... 1913
John B. Payne..... 1920

Secretary of Agriculture

David F. Houston..... 1913
Edwin T. Meredith..... 1920

Secretary of Commerce

William C. Redfield..... 1913
Joshua W. Alexander..... 1919

Secretary of Labor

William B. Wilson..... 1913

HARDING

Secretary of State

Charles E. Hughes..... 1921

Secretary of the Treasury

Andrew W. Mellon..... 1921

Secretary of War

John W. Weeks..... 1921

Attorney General

Harry M. Daugherty..... 1921

Postmaster General

Will H. Hays..... 1921
Hubert Work..... 1922
Harry S. New..... 1923

Secretary of the Navy

Edwin Denby..... 1921

Secretary of the Interior

Albert B. Fall..... 1921
Hubert Work..... 1923

Secretary of Agriculture

Henry C. Wallace..... 1921

Secretary of Commerce

Herbert Hoover..... 1921

Secretary of Labor

James J. Davis..... 1921

COOLIDGE

Secretary of State
Charles E. Hughes..... Contd
Frank B. Kellogg..... 1925

Secretary of the Treasury
Andrew W. Mellon..... Contd

Secretary of War
John W. Weeks..... Contd
Dwight F. Davis..... 1925

Attorney General
Harry M. Daugherty... Contd
Harlan F. Stone..... 1924
John G. Sargent..... 1925

Postmaster General
Harry S. New..... Contd

Secretary of the Navy
Edwin Denby..... Contd
Curtis D. Wilbur..... 1924

Secretary of the Interior
Hubert Work..... Contd
Roy O. West..... 1928

Secretary of Agriculture
Henry C. Wallace..... Contd
Howard M. Gore..... 1924
William M. Jardine.... 1925

Secretary of Commerce
Herbert Hoover..... Contd
William F. Whiting..... 1928

Secretary of Labor
James J. Davis..... Contd

¹ The Postmaster General did not become a Cabinet member until 1829. Earlier Postmasters General were: Samuel Osgood (1789), Timothy Pickering (1791), Joseph Habersham (1795), Gideon Granger (1801), Return J. Meigs, Jr. (1814) and John McLean (1823). ² On July 26, 1947, the Departments of War and of the Navy were incorporated into the Department of Defense.

HOOVER

Secretary of State
Frank B. Kellogg..... Contd
Henry L. Stimson..... 1929

Secretary of the Treasury
Andrew W. Mellon..... Contd
Ogden L. Mills..... 1932

Secretary of War
James W. Good..... 1929
Patrick J. Hurley..... 1929

Attorney General
William D. Mitchell.... 1929

Postmaster General
Walter F. Brown..... 1929

Secretary of the Navy
Charles F. Adams..... 1929

Secretary of the Interior
Ray Lyman Wilbur..... 1929

Secretary of Agriculture
Arthur M. Hyde..... 1929

Secretary of Commerce
Robert P. Lamont..... 1929
Roy D. Chapin..... 1932

Secretary of Labor
James J. Davis..... Contd
William N. Doak..... 1930

F. ROOSEVELT

Secretary of State
Cordell Hull..... 1933
E. R. Stettinius, Jr.... 1944

Secretary of the Treasury
William H. Woodin..... 1933
Henry Morgenthau, Jr.. 1934

Secretary of War

George H. Dern..... 1933
Harry H. Woodring.... 1936
Henry L. Stimson..... 1940

Attorney General

Homer S. Cummings... 1933
Frank Murphy..... 1939
Robert H. Jackson.... 1940
Francis Biddle..... 1941

Postmaster General

James A. Farley..... 1933
Frank C. Walker..... 1940

Secretary of the Navy

Claude A. Swanson.... 1933
Charles Edison..... 1940
Frank Knox..... 1940
James Forrestal..... 1944

Secretary of the Interior
Harold L. Ickes..... 1933

Secretary of Agriculture
Henry A. Wallace..... 1933
Claude R. Wickard.... 1940

Secretary of Commerce
Daniel C. Roper..... 1933
Harry L. Hopkins.... 1938
Jesse H. Jones..... 1940
Henry A. Wallace..... 1945

Secretary of Labor
Frances Perkins..... 1933

TRUMAN

Secretary of State
E. R. Stettinius, Jr.... Contd
James F. Byrnes..... 1945
George C. Marshall.... 1947
Dean Acheson..... 1949

Secretary of the Treasury

Henry Morgenthau, Jr. Contd
Fred M. Vinson..... 1945
John W. Snyder..... 1946

Secretary of Defense

James Forrestal..... 1947
Louis A. Johnson..... 1949
George C. Marshall.... 1950

Secretary of War²

Henry L. Stimson..... Contd
Robert P. Patterson... 1945

Attorney General

Francis Biddle..... Contd
Tom C. Clark..... 1945
J. Howard McGrath... 1949

Postmaster General

Frank C. Walker..... Contd
Robert E. Hannegan... 1945
Jesse M. Donaldson... 1947

Secretary of the Navy²

James Forrestal..... Contd
Julius C. Krug..... 1946
Oscar L. Chapman..... 1949

Secretary of the Interior

Harold L. Ickes..... Contd
Charles C. Krug..... 1946
Oscar L. Chapman..... 1949

Secretary of Agriculture

Claude R. Wickard.... Contd
Clinton P. Anderson... 1945
Charles F. Brannan... 1948

Secretary of Commerce

Henry A. Wallace..... Contd
W. Averell Harriman... 1946
Charles Sawyer..... 1948

Secretary of Labor

Frances Perkins..... Contd
Lewis B. Schwellenbach 1945
Maurice J. Tobin..... 1948

The Confederate States of America, 1861-65

President—Jefferson Davis; born, Christian (now Todd) Co., Ky., June 3, 1808; died, Dec. 6, 1889. Vice President—Alexander H. Stephens.

CABINET*

Secretary of State

Robert Toombs..... 1861
Robert M. T. Hunter... 1861
Judah P. Benjamin..... 1862

Secretary of Treasury

Christopher Memminger... 1861
George A. Trenholm..... 1864

Secretary of War

Leroy P. Walker..... 1861
Judah P. Benjamin..... 1861
George W. Randolph... 1862
James A. Seddon..... 1862
John C. Breckinridge... 1865

Secretary of Navy

Stephen R. Mallory..... 1861

Postmaster General

Henry T. Ellett..... 1861
John H. Reagan..... 1861

Attorney General

Judah P. Benjamin..... 1861
Thomas Bragg..... 1861
Thomas N. Watts..... 1862
George Davis..... 1864

* Dates are those of appointment.

Diplomatic Personnel to and from the United States

Source: U. S. Department of State.

Country	U. S. representative to	Rank	Representative from	Rank
Afghanistan.....	Louis G. Dreyfus, Jr.	Ambassador.	Sardar Mohammad Naim.	Ambassador
Argentina.....	Stanton Griffiths.	Ambassador.	Dr. Jerónimo Remorino.	Ambassador
Australia.....	Pete Jarman.	Ambassador.	Norman J. O. Makin.	Ambassador
Austria.....	Walter J. Donnelly.	Minister.	Dr. Ludwig Kleinwaechter.	Minister
Belgium.....	Robert D. Murphy.	Ambassador.	Baron Silvercrucys.	Ambassador
Bolivia.....	Irving Florman.	Ambassador.	Don Ricardo Martinez Vargas.	Ambassador
Brazil.....	Herschel V. Johnson.	Ambassador.	Mauricio Nabuco.	Ambassador
Burma.....	David McK. Key.	Ambassador.	U So Nyun.	Ambassador
Canada.....	Stanley Woodward.	Ambassador.	Hume Wrong.	Ambassador
Ceylon.....	Joseph C. Satterthwaite.	Ambassador.	G. C. S. Corea.	Ambassador
Chile.....	Claude G. Bowers.	Ambassador.	Felix Nieto del Rio.	Ambassador
China.....	().	Ambassador.	Dr. V. K. Wellington Koo.	Ambassador
Colombia.....	Willard L. Beaulac.	Ambassador.	Dr. Don Eduardo Zuleta-Angel.	Ambassador
Costa Rica.....	(Vacant).	Ambassador.	Don Mario Echandi Jimenez.	Ambassador
Cuba.....	Robert Butler.	Ambassador.	Dr. Louis Machado.	Ambassador
Czechoslovakia.....	Ellis O. Briggs.	Ambassador.	Dr. Vladimir Outrata.	Ambassador
Denmark.....	Mrs. Eugenie Anderson.	Ambassador.	Henrik de Kauffmann.	Ambassador
Dominican Republic.....	Ralph H. Ackerman.	Ambassador.	Dr. Luis Francisco Thomen.	Ambassador
Ecuador.....	John F. Simmons.	Ambassador.	Don Augusto Dillon.	Ambassador
Egypt.....	Jefferson Caffery.	Ambassador.	Mohamed Kamil Bey Abdul Rahim.	Ambassador
El Salvador.....	George P. Shaw.	Ambassador.	Dr. Don Hector David Castro.	Ambassador
Estonia.....	(Legation at Tallinn closed).		Johannes Kalv.	Act. Con. Gen.
Ethiopia.....	George R. Merrell.	Ambassador.	Ras H. S. Imru.	Minister
Finland.....	John W. Cabot.	Minister.	Dr. K. T. Jutila.	Minister
France.....	David K. E. Bruce.	Ambassador.	Henri Bonnet.	Ambassador
Germany.....	John J. McCloy.	U. S. High Comm.		
Great Britain.....	Walter S. Gifford.	Ambassador.	Sir Oliver Shewell Franks.	Ambassador
Greece.....	John E. Peurifoy.	Ambassador.	Athanase G. Politis.	Ambassador
Guatemala.....	Richard C. Patterson, Jr.	Ambassador.	Dr. Don Antonio Goubaud-Carrera.	Ambassador
Haiti.....	William E. De Courcy.	Ambassador.	Gustave Laraque.	Ambassador
Honduras.....	(Vacant).	Ambassador.	Dr. Don Rafael Heliodoro Valle.	Ambassador
Hungary.....	Nathaniel P. Davis.	Minister.	Imre Horvath.	Minister
Iceland.....	Edward B. Lawson.	Minister.	Thor Thors.	Minister
India.....	Loy W. Henderson.	Minister.	Moti Kirpalani.	Ambassador
Indo-China ²	Donald R. Heath.	Minister.		
Indonesia.....	H. Merle Cochran.	Ambassador.	Dr. Ali Sasroamidjiojo.	Ambassador
Iran.....	Henry F. Grady.	Ambassador.	Nasrollah Entezam.	Ambassador
Iraq.....	Edward S. Crocker, 2d.	Ambassador.	Abdullah Ibrahim Bakr.	Ch. d'Al. ad Int.
Ireland.....	George A. Garrett.	Ambassador.	John Joseph Hearne.	Ambassador
Israel.....	James Grover McDonald.	Ambassador.	Abba Eban.	Ambassador
Italy.....	James Clement Dunn.	Ambassador.	Alberto Tarchiani.	Ambassador
Jordan.....	Gerald A. Drew.	Chargé d'Affaires.	Dr. Yusuf Halkal.	Minister

Korea.....	John J. Muccio.....	Ambassador.....	Dr. John Myun Chang.....	Ambassador.....
Latvia.....	(Legation at Riga closed).....		Jules Feldmans.....	Chargé d'Affaires.....
Lebanon.....	Lowell C. Pinkerton.....	Minister.....	Dr. Charles Malik.....	Minister.....
Liberia.....	Edward R. Dudley.....	Ambassador.....	Charles D. B. King.....	Ambassador.....
Lilya.....	Andrew G. Lynch.....	Consul General.....		
Liechtenstein.....	E. Porter Kuykendall.....	Consul General.....		
Lithuania.....	(Legation at Kaunas closed).....		Povilas Zadeikis.....	Minister.....
Luxemburg.....	Mrs. Perle Mesta.....	Minister.....	Hugues Le Gallais.....	Minister.....
Mexico.....	William O'Dwyer.....	Ambassador.....	Don Rafael de la Colina.....	Ambassador.....
Morocco.....	Edwin A. Platt.....	Dipl. Agent.....		
Nepal.....	Loy W. Henderson.....	Minister.....	Gen. Shanker Shum Shere Jung Bahadur Rana.....	Minister.....
Netherlands.....	Selden Chapin.....	Ambassador.....	Dr. Jan Herman Van Roijen.....	Ambassador.....
New Zealand.....	Robert M. Scotten.....	Ambassador.....	Sir Carl Berendsen.....	Ambassador.....
Nicaragua.....	Capus M. Waynick.....	Ambassador.....	Dr. Don Guillermo Sevilla-Sacasa.....	Ambassador.....
Norway.....	Charles U. Bay.....	Ambassador.....	Wilhelm Munthe de Morgenstierne.....	Ambassador.....
Pakistan.....	Avra M. Warren.....	Ambassador.....	M. A. H. Isphani.....	Ambassador.....
Palestine.....	Raleigh A. Gibson.....	Consul General.....		
Panamá.....	Monnett B. Davis.....	Ambassador.....	Don Rodolfo Herbruger.....	Ambassador.....
Paraguay.....	Fletcher Warren.....	Ambassador.....	Dr. Don Luis Oscar Boethner.....	Ambassador.....
Peru.....	Harold H. Tittmann, Jr.....	Ambassador.....	Don Fernando Berckemeyer.....	Ambassador.....
Philippines.....	Myron Melvin Cowen.....	Ambassador.....	Joaquin M. Elizalde.....	Ambassador.....
Poland.....	Joseph Flack.....	Ambassador.....	Jozef Winiewicz.....	Ambassador.....
Portugal.....	Lincoln MacVeagh.....	Ambassador.....	Luis Esteves Fernandes.....	Ambassador.....
Rumania.....	Rudolf E. Schoenfeld.....	Minister.....	Mihail Magheru.....	Minister.....
Saudi Arabia.....	Raymond A. Hare.....	Ambassador.....	Sheikh Asad Al-Faqih.....	Ambassador.....
South Africa, Union of.....	John G. Erhardt.....	Ambassador.....	Gerhardas P. Jooste.....	Ambassador.....
Spain.....	(Vacant).....	Ambassador.....	Don Eduardo Propper de Callejón.....	Ch. d'Aff. ad Int.....
Sweden.....	W. Walton Butterworth.....	Ambassador.....	Erik Boheman.....	Ambassador.....
Switzerland.....	John Carter Vincent.....	Minister.....	Charles Bruggmann.....	Minister.....
Syria.....	Cavendish W. Cannon.....	Minister.....	Faiz El-Khourl.....	Minister.....
Thailand.....	Edwin F. Stanton.....	Ambassador.....	Prince Wan Waithayakon.....	Ambassador.....
Turkey.....	George Wadsworth.....	Ambassador.....	Feridun C. Erkin.....	Ambassador.....
U.S.S.R.....	Adm. Alan G. Kirk.....	Ambassador.....	Alexander S. Panyushkin.....	Ambassador.....
Uruguay.....	Christian M. Ravindal.....	Ambassador.....	Dr. Alberto Dominguez-Cámpora.....	Ambassador.....
Venezuela.....	Norman Armour.....	Ambassador.....	José Rafael Pocderra.....	Ambassador.....
Yemen.....	Raymond A. Hare.....	Minister.....		
Yugoslavia.....	George V. Allen.....	Ambassador.....	Vladimir Popovic.....	Ambassador.....

¹ Embassy at Nanking closed March 5, 1950. Robert C. Strong is Chargé d'Affaires ad Interim in Formosa.

² Vient'ian, Cambodia, Laos.

NOTE: Diplomatic relations severed Feb. 24, 1950, between U. S. and Bulgaria.

Special Offices

JAPAN: Tokyo (Office of U. S. Political Adviser to Supreme Commander for Allied Powers)

SWITZERLAND: Geneva (Office of U. S. Delegation to Economic Commission for Europe)

TRIESTE: Trieste (Office of U. S. Political Adviser to Commander, British-U. S. Zone, Free Territory of Trieste)

William J. Schald, acting U. S. political adviser.

Robert E. Asher, resident chief.

Charles F. Baldwin, Robert Alexander, Foreign Service officers

Qualifications for Voting in the 48 States

Source: Questionnaires to the states.

State	Minimum length of U. S. citizenship	Residence ¹			Literacy test	Poll tax ²
		State	County	District		
Alabama.....		2 yr.	1 yr.	3 mo. ³	Yes	\$1.50
Arizona.....	1 yr.	1 yr.	3 mo.	30 da.	.....
Arkansas.....		1 yr.	6 mo.	30 da. ⁴	.....	1.00
California.....	1 yr.	1 yr.	3 mo.	54 da. ⁴	Yes	.....
Colorado.....		1 yr.	3 mo.	30 da. ⁵	.....
Connecticut.....		1 yr.	.....	6 mo. ⁶	Yes	.....
Delaware.....		1 yr.	3 mo.	30 da.	Yes	.....
Florida.....		1 yr.	6 mo.	.....	.....
Georgia ⁷		1 yr.	6 mo.	6 mo.	Yes	.....
Idaho.....	(⁹)	6 mo.	30 da.	.....	.....
Illinois.....		1 yr.	3 mo.	30 da.	.....
Indiana.....		6 mo.	2 mo. ⁹	30 da. ⁴	.....
Iowa.....		6 mo.	2 mo.	10 da.	.....
Kansas.....		6 mo.	.....	30 da. ¹⁰	.....
Kentucky.....		1 yr.	6 mo.	2 mo.	.....
Louisiana.....		2 yr.	1 yr. ¹¹	3 mo.	.....
Maine.....		6 mo.	.....	3 mo. ⁶	Yes	.....
Maryland.....		1 yr.	6 mo.	6 mo.	.....
Massachusetts.....		1 yr.	.....	6 mo. ⁶	Yes	.....
Michigan.....		6 mo.	.....	20 da. ⁶	.....
Minnesota.....	3 mo.	6 mo.	.....	30 da.	.....
Mississippi.....		2 yr.	.....	1 yr.	(¹²)	2.00
Missouri.....		1 yr.	.....	2 mo. ⁶	.....
Montana.....		1 yr.	30 da.	30 da. ⁴	.....
Nebraska.....		6 mo.	40 da.	10 da.	.....
Nevada.....		6 mo.	30 da.	10 da. ⁴	.....
New Hampshire.....		6 mo.	.....	6 mo. ⁶	Yes	.....
New Jersey.....		1 yr.	5 mo.	.....	.....
New Mexico.....		1 yr.	3 mo.	30 da. ⁴	.....
New York.....	3 mo.	1 yr.	4 mo.	30 da.	Yes	.....
North Carolina.....		1 yr.	4 mo.	4 mo.	Yes	.....
North Dakota.....		1 yr.	3 mo.	30 da. ⁴	.....
Ohio.....		1 yr.	40 da.	40 da. ⁴	.....
Oklahoma.....		1 yr.	6 mo.	30 da. ⁴	.....
Oregon.....		6 mo.	.....	30 da.	Yes	.....
Pennsylvania.....	30 da.	1 yr. ¹³	.....	2 mo.	.....
Rhode Island.....		2 yr.	.....	6 mo. ⁶	.....
South Carolina.....	2 yr.	2 yr.	1 yr.	4 mo.	.....	(¹³)
South Dakota.....	5 yr.	1 yr.	3 mo.	30 da. ⁴	.....
Tennessee.....		1 yr.	6 mo.	.....	.....	1.00 ¹⁴
Texas.....		1 yr.	6 mo.	.....	.....	1.75
Utah.....	3 mo.	1 yr.	4 mo.	2 mo. ⁴	.....
Vermont.....		1 yr.	.....	3 mo. ^{6,15}	.....
Virginia.....		1 yr.	6 mo. ¹⁶	30 da. ⁴	Yes	1.50
Washington.....		1 yr.	3 mo.	30 da. ¹⁷	Yes	.....
West Virginia.....		1 yr.	2 mo.	.....	.....
Wisconsin.....		1 yr.	.....	10 da.	.....
Wyoming.....		1 yr.	2 mo.	10 da.	.....

¹ Registration of all or part of the voters is required in most states. ² Annual levy. Although poll (or head) taxes are levied in several other states, those listed make payment of the tax a condition for voting. ³ Precinct or ward. ⁴ Precinct. ⁵ City or town, and 15 days in precinct. ⁶ City or town. ⁷ Minimum voting age is 18; in all other states it is 21. ⁸ First paper must have been taken out. ⁹ Township. ¹⁰ Township or ward. ¹¹ Parish. ¹² Must be able to read or understand when read to him any section of Mississippi constitution. ¹³ 6 months if previously qualified elector or natural-born citizen of state. ¹⁴ Women are exempt from poll tax. ¹⁵ To qualify to vote for representatives to general assembly or justices. ¹⁶ County, city, or town. ¹⁷ City, town, ward, or precinct. ¹⁸ Repealed in 1945.

Plurality and Majority

In order to win a plurality in an election, a candidate must receive a greater number of votes than any candidate running against him. If he receives 50 votes, for example, and two other candidates receive 49 and 2, he will have a plurality of one vote over his closest opponent.

However, a candidate does not have a majority unless he receives more than 50 per cent of the total votes cast. In the example above, the candidate does not have a majority, because his 50 votes are less than 50 per cent of the 101 votes cast.

If only two candidates receive votes, a plurality is necessarily a majority, but if more than two candidates receive votes, it is possible for one to have a substantial plurality without a majority.

SPEAKERS OF THE HOUSE OF REPRESENTATIVES

Source: Congressional Directory.

Name and state	Congress	Dates served	Name and state	Congress	Dates served
F. A. C. Muhlenburg (Pa.)	1	1789-1791	James L. Orr (S. C.)	35	1857-1859
Jonathan Trumbull (Conn.)	2	1791-1793	William Pennington (N. J.)	36	1859-1861
F. A. C. Muhlenburg (Pa.)	3	1793-1795	Galusha A. Grow (Pa.)	37	1861-1863
Jonathan Dayton (N. J.) ¹	4-5	1795-1799	Schuyler Colfax (Ind.)	38-40	1863-1869
Theodore Sedgwick (Mass.)	6	1799-1801	Theodore M. Pomeroy (N. Y.) ⁶	40	1869-1869
Nathaniel Macon (N. C.)	7-9	1801-1807	James G. Blaine (Maine)	41-43	1869-1875
Joseph B. Varnum (Mass.)	10-11	1807-1811	Michael C. Kerr (Ind.) ⁶	44	1875-1876
Henry Clay (Ky.) ²	12-13	1811-1814	Samuel J. Randall (Pa.)	44-46	1876-1881
Langdon Cheves (S. C.)	13	1814-1815	J. Warren Keifer (Ohio)	47	1881-1883
Henry Clay (Ky.) ³	14-16	1815-1820	John G. Carlisle (Ky.)	48-50	1883-1889
John W. Taylor (N. Y.)	16	1820-1821	Thomas B. Reed (Maine)	51	1889-1891
Philip P. Barbour (Va.)	17	1821-1823	Charles F. Crisp (Ga.)	52-53	1891-1895
Henry Clay (Ky.)	18	1823-1825	Thomas B. Reed (Maine)	54-55	1895-1899
John W. Taylor (N. Y.)	19	1825-1827	David B. Henderson (Iowa)	56-57	1899-1903
Andrew Stevenson (Va.) ⁴	20-23	1827-1834	Joseph G. Cannon (Ill.)	58-61	1903-1911
John Bell (Tenn.)	23	1834-1835	Champ Clark (Mo.)	62-65	1911-1919
James K. Polk (Tenn.)	24-25	1835-1839	Frederick H. Gillett (Mass.)	66-68	1919-1925
Robert M. T. Hunter (Va.)	26	1839-1841	Nicholas Longworth (Ohio)	69-71	1925-1931
John White (Ky.)	27	1841-1843	John N. Garner (Tex.)	72	1931-1933
John W. Jones (Va.)	28	1843-1845	Henry T. Rainey (Ill.)	73	1933-1935
John W. Davis (Ind.)	29	1845-1847	Joseph W. Byrns (Tenn.) ⁷	74	1935-1936
Robert C. Winthrop (Mass.)	30	1847-1849	William B. Bankhead (Ala.) ⁸	74-76	1936-1940
Howell Cobb (Ga.)	31	1849-1851	Sam Rayburn (Tex.)	76-79	1940-1947
Linn Boyd (Ky.)	32-33	1851-1855	Joseph W. Martin, Jr. (Mass.)	80	1947-1949
Nathaniel P. Banks (Mass.)	34	1855-1857	Sam Rayburn (Tex.)	81	1949-

¹ George Dent (Md.) was elected Speaker pro tempore for Apr. 20 and May 28, 1798. ² Resigned during 2d session of 13th Congress. ³ Resigned between 1st and 2d sessions of 16th Congress. ⁴ Resigned during 1st session of 23d Congress. ⁵ Elected Speaker and served the day of adjournment. ⁶ Died between 1st and 2d sessions of 44th Congress. During 1st session, there were two Speakers pro tempore: Samuel S. Cox (N. Y.), appointed for Feb. 17, May 12 and June 19, 1876, and Milton Saylor (Ohio), appointed for June 4, 1876. ⁷ Died during 2d session of 74th Congress. ⁸ Died during 3d session of 76th Congress.

The White House

The White House, the official residence of the President, is located on Pennsylvania Avenue in Washington, D. C. The site covering about 16 acres was selected by President Washington and Pierre Charles L'Enfant, and the architect was James Hoban. The design of the mansion is said to have been suggested by the Duke of Leinster's Palace in Ireland. The cornerstone was laid Oct. 13, 1792, and the first residents were President and Mrs. John Adams in Nov., 1800. The building was fired by the British in 1814, and the sandstone exterior was painted white in 1815.

The rooms for public functions are on the first floor; on the second are the President's apartments. The most celebrated public room is the East Room, where formal receptions take place. Other public rooms are the Red Room, the Green Room, and the Blue Room. The State Dining Room is used for formal dinners.

The Executive Office, a three-story struc-

ture at the west end of the West Terrace, was added to the original building in 1902 to accommodate the President's office staff, and several additions have since been made. In 1942, a three-story building was erected on the East Terrace, and now serves as the White House main entrance. In 1948, a second-story balcony was added to the White House inside the Ionic pillars of the south portico.

The White House was closed Nov. 6, 1948, for social engagements and sightseers because of the deterioration of the building and the fear that it might collapse at any time. On Nov. 21, President Truman and his family moved into Blair House across the street.

It was decided that, instead of being torn down, the walls would be retained and strengthened and the interior rebuilt. When repairs are completed, the building will have 77 rooms instead of 69.

Justices of the United States Supreme Court

Name	State	Term	Years	Born	Died	Name	State	Term	Years	Born	Died
*John Jay	N. Y.	1789-1795	6	1745	1829	Stanley Matthews	Ohio	1881-1889	8	1824	1889
John Rutledge	S. C.	1789-1791	2	1739	1800	Horace Gray	Mass.	1881-1902	21	1828	1902
William Cushing	Mass.	1789-1810	21	1732	1810	Samuel Blatchford	N. Y.	1882-1893	11	1820	1893
James Wilson	Pa.	1789-1798	9	1742	1798	Lucius Q. Lamar	Miss.	1888-1893	5	1825	1893
John Blair	Va.	1789-1796	7	1732	1800	*Melville W. Fuller	Ill.	1888-1910	22	1833	1910
James Iredell	N. C.	1790-1799	9	1751	1799	David J. Brewer	Kans.	1889-1910	21	1837	1910
Thomas Johnson	Md.	1792-1793	1/2	1732	1819	Henry B. Brown	Mich.	1890-1906	16	1836	1913
William Paterson	N. J.	1793-1806	13	1745	1806	George Shiras, Jr.	Pa.	1892-1903	11	1832	1924
*John Rutledge	S. C.	1795-1795	..	1739	1800	Howell E. Jackson	Tenn.	1893-1895	2	1832	1895
Samuel Chase	Md.	1796-1811	15	1741	1811	Edward D. White	La.	1894-1910	16	1845	1921
*Oliver Ellsworth	Conn.	1796-1800	4	1745	1807	Rufus W. Peckham	N. Y.	1895-1909	14	1838	1909
Bushrod Washington	Va.	1798-1829	31	1762	1829	Joseph McKenna	Calif.	1898-1925	27	1843	1926
Alfred Moore	N. C.	1800-1804	4	1755	1810	Oliver W. Holmes	Mass.	1902-1932	30	1841	1935
*John Marshall	Va.	1801-1835	34	1755	1835	William R. Day	Ohio	1903-1922	19	1849	1923
William Johnson	S. C.	1804-1834	30	1771	1834	William H. Moody	Mass.	1906-1910	4	1853	1917
Brock Livingston	N. Y.	1806-1823	17	1757	1823	Horace H. Lurton	Tenn.	1909-1914	5	1844	1914
Thomas Todd	Ky.	1807-1826	19	1765	1826	*Edward D. White	La.	1910-1921	11	1845	1921
Joseph Story	Mass.	1811-1845	34	1779	1845	Charles E. Hughes	N. Y.	1910-1916	6	1862	1948
Gabriel Duval	Md.	1811-1835	23	1752	1844	Willis Van Devanter	Wyo.	1910-1937	26	1859	1941
Smith Thompson	N. Y.	1823-1843	20	1768	1843	Joseph R. Lamar	Ga.	1910-1916	6	1857	1916
Robert Trimble	Ky.	1826-1828	2	1777	1828	Mahlon Pitney	N. J.	1912-1923	11	1858	1924
John McLean	Ohio	1829-1861	32	1785	1861	Jas. C. McReynolds	Tenn.	1914-1941	26	1862	1946
Henry Baldwin	Pa.	1830-1844	14	1780	1844	Louis D. Brandeis	Mass.	1916-1939	23	1856	1941
James M. Wayne	Ga.	1835-1867	32	1790	1867	John H. Clarke	Ohio	1916-1922	6	1857	1945
*Roger B. Taney	Md.	1836-1864	28	1777	1864	*William H. Taft	Conn.	1921-1930	9	1857	1930
Philip P. Barbour	Va.	1836-1841	5	1783	1841	George Sutherland	Utah	1922-1938	16	1862	1942
John Catron	Tenn.	1837-1865	28	1786	1865	Pierce Butler	Minn.	1922-1939	17	1866	1939
John McKinley	Ala.	1837-1852	15	1780	1852	Edward T. Sanford	Tenn.	1923-1930	7	1865	1930
Peter V. Daniel	Va.	1841-1860	19	1784	1860	Harlan F. Stone	N. Y.	1925-1941	16	1872	1946
Samuel Nelson	N. Y.	1845-1872	27	1792	1873	*Charles E. Hughes	N. Y.	1930-1941	11	1862	1948
Levi Woodbury	N. H.	1845-1851	6	1789	1851	Owen J. Roberts	Pa.	1930-1945	15	1875	
Robert C. Grier	Pa.	1846-1870	23	1794	1870	Benjamin N. Cardozo	N. Y.	1932-1938	6	1870	1938
Benjamin R. Curtis	Mass.	1851-1857	6	1809	1874	Hugo L. Black	Ala.	1937		1886	
John A. Campbell	Ala.	1853-1861	8	1811	1889	Stanley F. Reed	Ky.	1938		1884	
Nathan Clifford	Maine	1858-1881	23	1803	1881	Felix Frankfurter	Mass.	1939		1882	
Noah H. Swayne	Ohio	1862-1881	13	1804	1884	William O. Douglas	Conn.	1939		1898	
Samuel F. Miller	Iowa	1862-1890	28	1816	1890	Frank Murphy	Mich.	1940-1949	9	1890	1949
David Davis	Ill.	1862-1877	15	1815	1886	*Harlan F. Stone	N. Y.	1941-1946	5	1872	1946
Stephen J. Field	Calif.	1863-1897	34	1816	1899	James F. Byrnes	S. C.	1941-1942	1	1879	
*Salmon P. Chase	Ohio	1864-1873	9	1808	1873	Robert H. Jackson	N. Y.	1941		1892	
William Strong	Pa.	1870-1880	10	1808	1895	Wiley B. Rutledge	Iowa	1943-1949	6	1894	1949
Joseph P. Bradley	N. J.	1870-1892	22	1813	1892	Harold H. Burton	Ohio	1945		1888	
Ward Hunt	N. Y.	1872-1882	10	1810	1886	*Fred M. Vinson	Ky.	1946		1890	
*Morrison R. Waite	Ohio	1874-1888	14	1816	1888	Tom C. Clark	Tex.	1949		1899	
John M. Harlan	Ky.	1877-1911	34	1833	1911	Sherman Minton	Ind.	1949		1890	
William B. Woods	Ga.	1880-1887	7	1824	1887						

* Chief Justices. † Appointed and served one term, but not confirmed by Senate.

Federal Impeachments

Source: Congressional Directory.

The Senate has sat as a court of impeachment in the following cases:

WILLIAM BLOUNT, Senator from Tennessee; charges dismissed for want of jurisdiction, January 14, 1799.

JOHN PICKERING, Judge of the U. S. District Court for New Hampshire; removed from office March 12, 1804.

SAMUEL CHASE, Associate Justice of the Supreme Court; acquitted March 1, 1805.

JAMES H. PECK, Judge of the U. S. District Court for Missouri; acquitted Jan. 31, 1831.

WEST H. HUMPHREYS, Judge of the United States District Court for the middle, eastern, and western districts of Tennessee; removed from office June 26, 1862.

ANDREW JOHNSON, President of the United States; acquitted May 26, 1868.

WILLIAM W. BELKNAP, Secretary of War; acquitted Aug. 1, 1876.

CHARLES SWAYNE, Judge of the United States District Court for the northern district of Florida; acquitted Feb. 27, 1905.

ROBERT W. ARCHBALD, Associate Judge, United States Commerce Court; removed from office January 13, 1913.

GEORGE W. ENGLISH, Judge of the U. S. District Court for the eastern district of Illinois; resigned office November 4, 1926; impeachment proceedings dismissed.

HAROLD LOUDERBACK, Judge of the U. S. District Court for the northern district of California; acquitted May 24, 1933.

HALSTED L. RITTER, Judge of the U. S. District Court for the southern district of Florida; removed April 17, 1936.

Principal Bills and Treaties Since 1900

PARTY ABBREVIATIONS

Dem.—Democratic
Rep.—RepublicanA.L.—American Labor
F.L.—Farmer-LaborInd.—Independent
Prog.—ProgressiveProh.—Prohibition
Soc.—Socialist

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Hay-Pauncefote Treaty. England agreed the U. S. can build and control an Isthmian canal open to all nations on equal terms (ratified Dec. 16, 1901).		No vote required		72	6	Nov. 18, 1901
Newlands Act. Authorized irrigation projects in 16 western states.		146	55	No roll-call vote		June 17, 1902
Spooner Bill. Authorized purchase of New Panama Canal Company's rights.		252	8	67	6	June 28, 1902
Elkins Act. Forbade railroads from deviating from published rates; punished givers and receivers of rebates.		241	6	No record vote		Feb. 19, 1903
Hay-Bunau-Varilla Treaty. Granted the U. S. a ten-mile strip in Panama in perpetuity for \$10,000,000 in gold and an annuity of \$250,000.	Dem. Rep.	No vote required		9 41	15 1	Mar. 19, 1903
Hepburn Rate Bill. Gave the ICC control over express companies and pipe lines; allowed them to reduce rates upon complaint of shipper; outlawed midnight rates; forbade free passes; required uniform book-keeping system.		216	4	71	3	June 29, 1906
Pure Food and Drug Act. Made shipments in interstate commerce of adulterated foods and drugs illegal.		240	17	63	4	June 30, 1906
Payne-Aldrich Tariff. Protective, averaging 36.38 per cent; lowered rates on coal, lumber, etc.; free list included wood pulp, oil, etc.		195	183	47	31	Aug. 5, 1909
Immigration Act. Barred paupers, anarchists, criminals, and diseased persons.						Mar. 26, 1910
Mann-Elkins Act. Gave the ICC jurisdiction over telephone and telegraph companies; right to alter railroad rates on their own initiative.		200	126	50	12	June 18, 1910
Admission of New Mexico.		No roll-call vote		53	8	Jan. 6, 1912
Admission of Arizona.		No roll-call vote		53	8	Feb. 14, 1912
16th Amendment. Legalized the income tax.		317	14	77	0	Feb. 25, 1913
Webb-Kenyon Interstate Liquor Shipment Act. Forbade transportation of liquor from wet to dry states.		240	65	No roll-call vote		Vetoed, Feb. 23, 1913
		244	(Reconsideration vote) 95	62	21	Mar. 1, 1913
17th Amendment. Provided for popular election of Senators.		237	39	64	24	May 31, 1913
Underwood-Simmons Tariff. Averaged 26.67 per cent with 958 reductions, 86 increases and 307 unchanged items.		254	103	36	17	Oct. 3, 1913
Glass-Owen Bill. Established a Federal Reserve system.		298	60	43	25	Dec. 23, 1913
Federal Trade Commission. Established to enforce anti-trust laws.		No roll-call vote		53	16	Sept. 26, 1914
Clayton Antitrust Act. Prohibited monopolistic price discrimination, restrictive sales or leases, incorporate stock holding, interlocking directorates of competing companies capitalized at \$1,000,000 or more. Exempted labor from antitrust laws and declared peaceful picketing legal.		244	54	35	24	Oct. 15, 1914
Federal Farm Loan Act. Created system of land banks to lend money to farmers on their land and permanent improvements.		No roll-call vote		58	5	July 17, 1916
Keating-Owen Act. Forbade shipping in interstate commerce of goods produced by children. (Declared unconstitutional in 1918.)		337	46	52	12	Sept. 1, 1916

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Adamson Act. Limited working hours of railroad employees to 8 per day on interstate railroads.		259	36	43	28	Sept. 3-5, 1916*
Burnett Immigration Bill. Required literacy test for immigrants.		308	87	64	7	Vetoed, Jan. 29, 1917
		285	(Reconsideration vote) 106	62	19	Feb. 5, 1917
Armed Neutrality Act. Allowed American vessels to be armed in war zones.				Filibustered		Defeated, Mar. 4, 1917
Declaration of War. Against Germany (World War I).		373	50	82	6	Apr. 6, 1917
Volstead Act. Prohibited manufacture, transportation and sale of beverages containing more than .5 per cent alcohol.		321	70	Voice vote approval		Vetoed, Oct. 27, 1919
			(Reconsideration vote)			Oct. 28, 1919
	Dem.	...	...	27	11	Oct. 28, 1919
	Rep.	...	...	38	9	Oct. 28, 1919
Treaty of Versailles.	Dem.	No vote required		4	42	Rejected, Nov. 19, 1919
	Rep.			35	13	Nov. 19, 1919
18th Amendment. Forbade manufacture, sale and transportation of intoxicating liquors.	Dem.	141	64	36	12	Jan. 16, 1920
	Rep.	137	62	29	8	Jan. 16, 1920
	Ind.	2	...	..	..
	Proh.	1	...	..	..
	Prog.	1	1	..	..
	Soc.	...	1	..	..
Transportation Act. Reorganized ICC with 11 members and increased powers; authorized loans to railroads; created Railroad Labor Board; provided for consolidation of railroads.		250	150	47	17	Feb. 29, 1920
Treaty of Versailles.	Dem.	No vote required		21	23	Rejected, Mar. 19, 1920
	Rep.			28	12	Mar. 19, 1920
Federal Water Power Act. Created federal power commission to license citizens who use navigable streams for power; licenses limited to 50 years.				52	18	June 18, 1920
19th Amendment. Gave women the right to vote.	Dem.	102	70	20	17	Aug. 26, 1920
	Rep.	200	19	36	8	Aug. 26, 1920
	Ind.	1	...	..	..
	Prog.	1	...	..	..
Emergency Quota Act. Limited annual number of immigrants from any country to 3 per cent of that nationality living in U. S. in 1910. (Renewed in 1922 for two more years.)		No record vote		78	1	May 19, 1921
Emergency Tariff Act. Raised rates on agricultural articles, wool, sugar, chemicals, etc.	Dem.	...	...	7	27	May 27, 1921
	Rep.	...	...	56	1	May 27, 1921
Capper-Volstead Act. Exempted farm co-operatives from antitrust laws.		284	49	58	1	Feb. 18, 1922
Washington Conference Treaties:						
Four Power Pacific Peace Pact. Related to Pacific island possessions of Britain, France, U. S., and Japan.	Dem.	No vote required		12	23	Mar. 24, 1922
	Rep.			55	4	Mar. 24, 1922
Five Power Limitation on Naval Armaments Treaty. Powers were U. S., Britain, France, Italy and Japan.		No vote required		74	1	Mar. 29, 1922
Nine Power Treaty. Guaranteed the territorial integrity of China.		No vote required		65	0	Mar. 30, 1922
Fordney-McCumber Tariff. Highly protective, averaging 33.22 per cent; gave tariff commission power to suggest that President increase or decrease rates not more than 50 per cent of original rate on any item to meet competition.	Dem.	...	...	3	24	Sept. 21, 1922
	Rep.	...	...	45	1	Sept. 21, 1922
World Court Protocol.	Dem.	No vote required		23	3	Defeated, Mar. 3, 1923
	Rep.			1	46	Mar. 3, 1923

* As Sept. 3 was a Sunday, the validity of the President's signature was questioned. Therefore, the bill was re-signed on the following Tuesday.

Bill or treaty	Party	House vote		Senate vote		Date enacted	
		Yea	Nay	Yea	Nay		
Federal Intermediate Credit Act. Lent money to farmers to extent of 75 per cent of value of harvested crops and livestock.		277	3	No record vote		Mar. 4, 1923	
Bonus Bill. Provided 20-year endowment policies for veterans.	Dem.	177	20	32	9	Vetoed, May 15, 1924	
	Rep.	175	34	33	8		
	F.L.	1	...	2	..		
	Soc.	1	...	..	..
	Ind.	1	...	..	..
	(Reconsideration vote)						May 19, 1924
	Dem.	145	21	27	9		
	Rep.	166	57	30	17		
	F.L.	...	...	2	..
	Soc.	1	...	..	..
	Ind.	1	...	..	..
Immigration Quota Law. Limited annual number of immigrants to 2 per cent of each country's residents in U. S. in 1890. After 1927, the number was to be limited annually to 150,000. Did not apply to nations of Western Hemisphere.		308	58	69	9	May 26, 1924	
World Court Membership.	Dem.	No vote required		36	2	Jan. 27, 1926	
	Rep.			40	14		
	F.L.			..	1		
McNary-Haugen Bill. Lent money to farm co-operatives and paid farmers equalizing price on their products.	Dem.	97	70	22	17	Vetoed, Feb. 25, 1927; no reconsideration vote	
	Rep.	113	108	24	22		
	F.L.	2	...	1	..		
	Soc.	1	...	..	..
	Ind.	1	...	..	..
McNary-Haugen Bill. (Re-passage of bill the following year.)	Dem.	100	53	28	9	Vetoed, May 23, 1928	
	Rep.	101	68	24	14		
	F.L.	2	...	1	..		
	Soc.	1	...	..	..
	(Reconsideration vote)						Defeated, May 25, 1928
	Dem.	No vote required		29	12		
	Rep.			20	19		
	F.L.			1	..		
	Norris-Morin Resolution. Would have completed construction of Muscle Shoals for nitrates and power.		251	165	48	25	Pocket veto, June 4, 1928
	Kellogg-Briand Pact. Outlawed wars and prescribed arbitration of international disputes.		No vote required		85	1	Jan. 15, 1929
Agricultural Marketing Act. Created federal farm board with power to lend money to farm co-operatives and to create stabilization corporations to buy farm surplus and to store and sell abroad to maintain prices.	Dem.	121	32	33	2	June 15, 1929	
	Rep.	245	2	21	32		
	F.L.	1	...	..	..
Hawley-Smoot Tariff. Very high protective tariff, averaging 40.08 per cent but giving President power to initiate reduction or increase in rates.	Dem.	14	132	5	30	June 17, 1930	
	Rep.	208	20	39	11		
	F.L.	...	1	..	1		
Bonus Loan Bill. Increased amount veterans might borrow and reduced interest rate.	Dem.	150	...	37	..	Vetoed, Feb. 26, 1931	
	Rep.	212	39	34	12		
	F.L.	1	...	1	..		
	(Reconsideration vote)						Feb. 27, 1931
	Dem.	148	...	39	1		
	Rep.	179	79	36	16		
	F.L.	1	...	1	..		
	Norris Resolution. Would have completed Muscle Shoals.	Dem.	128	3	35	2	Vetoed, Mar. 3, 1931; no reconsideration vote
		Rep.	87	150	20	26	
		F.L.	1	
	War Debt Moratorium. Provided for moratorium on payment of interest and war debt installments by nations indebted to U. S.	Dem.	120	95	33	6	Dec. 23, 1931
Rep.		196	5	36	6		
F.L.		1	...	..	..
Reconstruction Finance Corporation. Established with a working fund of \$500,000,000 and power to borrow more to release frozen assets in banks and mortgage companies and to help bankrupt railroads.	Dem.	153	43	29	5	Jan. 22, 1932	
	Rep.	182	12	34	3		

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Norris-LaGuardia Act. Limited granting of injunctions against labor; required open testimony in open court and outlawed yellow dog contracts.		363	13	75	5	Mar. 23, 1932
Hawes-Cutting Bill. Granted Philippine independence but was rejected by the Philippine legislature because of its economic and immigration provisions.		No record vote		No record vote		Vetoed, Jan. 13, 1933
		(Reconsideration vote)				
	Dem.	191	1	45	1	
	Rep.	82	93	20	25	
	F.L.	1	...	1	...	
20th Amendment. Changed date of meeting of Congress to Jan. 3 and date of Presidential inauguration to Jan. 20; authorized procedure for selection of filling vacancies in Presidency.		335	56	73	3	Jan. 23, 1933
3.2 Percent Liquor Law. Legalized manufacture and sale of 3.2 wines and beers.	Dem. Rep.	No record vote		33 10	19 17	Mar. 22, 1933
Civilian Conservation Corps. Created to relieve unemployment and to work at reforestation, road building and flood control.		No roll-call vote		No roll-call vote		Mar. 31, 1933
Agricultural Adjustment Act. Created the AAA, which was authorized to limit acreage on specified crops at farmers' option and to pay benefits to farmers; money for this purpose to be raised by a process tax, which was declared unconstitutional Jan. 16, 1936.		315	98	52	31	May 12, 1933
Tennessee Valley Authority. Established to develop and sell electric power, to serve as yardstick for electricity rates, to develop rural electrification, to establish flood control, and to produce fertilizer.	Dem.	284	2	48	3	May 18, 1933
	Rep.	17	89	14	17	
	F.L.	5	...	1	..	
Federal Securities Act. Required that all stock and bond issues be registered and approved.		No roll-call vote		No roll-call vote		May 27, 1933
Home Owners Refinancing Act. Established the HOLC, which took over mortgages in exchange for bonds in order to save home owners from losing homes.		383	4	No record vote		June 13, 1933
Glass-Steagall Banking Act. Created Federal Deposit Insurance Corporation to insure deposits up to \$5000; required that private banks be either investment or deposit banks, but not both.		No record vote		No roll-call vote		June 16, 1933
National Industrial Recovery Act. Created NRA; authorized establishment of trade associations; suspended antitrust laws; authorized drawing-up of codes of Fair Competition to be accepted by President; guaranteed collective bargaining and required employers to accept approved maximum and minimum wage provisions. (Declared unconstitutional in 1935.)	Dem.	266	25	46	4	June 16, 1933
	Rep.	53	50	10	20	
	F.L.	4	...	1	..	
21st Amendment. Repealed prohibition.	Dem.	179	32	33	9	Dec. 5, 1933
	Rep.	109	89	29	14	
	F.L.	1	...	1	..	
Gold Reserve Act. Gave President power to devalue gold and to impound for treasury all gold in Federal System and to establish Exchange Stabilization Fund.	Dem.	287	2	55	1	Jan. 30, 1934
	Rep.	68	38	10	22	
	F.L.	5	...	1	..	
Farm Mortgage Refinancing Act. Created Federal Farm Mortgage Corporation to assist farmers in payment of mortgages on easier interest terms.		No record vote		No record vote		Jan. 31, 1934
Tydings-McDuffie Act. Gave the Philippine Islands independence.	Dem.	No roll-call vote		51	..	Mar. 24, 1934
	Rep.			16	8	
	F.L.			1	..	
Johnson Debt Default Bill. Forbade sale in this country of securities of defaulting countries.		No record vote		No record vote		Apr. 13, 1934
Home Owners Loan Act. Supplemented Home Owners Refinancing Act.		337	1	35	34	Apr. 28, 1934
Securities and Exchange Act. Established Securities and Exchange Commission; required licensing of stock exchanges; made certain speculative practices illegal; gave Federal Reserve Board power to fix margins; required full financial statements from registered companies.	Dem.	254	11	47	1	June 6, 1934
	Rep.	22	73	15	12	
	F.L.	4	...	..	..

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Trade Agreements Act. Authorized President to reduce tariffs by as much as 50 per cent of prevailing rates for those countries which granted the U. S. most favored nation treatment without the need for Senatorial ratification for three years.	Dem. Rep. F.L.	No record vote		51 5 1	5 28 ..	June 12, 1934
National Housing Act. Created Federal Housing Administration to administer funds for modernizing homes and for lending for new construction.		176	19	No record vote		June 28, 1934
Federal Farm Bankruptcy Act (Frazier-Lemke Act). Declared moratorium on farm mortgage foreclosures. (Declared unconstitutional in May, 1935.)		No record vote		60	16	June 28, 1934
World Court Ratification.	Dem. Rep. F.L. Prog.	No vote required		43 9	20 14 1 1	Defeated, Jan. 29, 1935
Soldiers' Bonus Bill. Would have paid off veterans compensation certificates.		318	90	55	33	Vetoed, May 22, 1935
		322	98	40	54	Defeated, May 23, 1935
		(Reconsideration vote)				
National Labor Relations Act (Wagner-Connery Act). Created the NLRB with power to determine appropriate collective bargaining unit subject to elections they supervised at request of the workers; to certify the duly chosen trade union and to take testimony about unfair employer practices and issue cease and desist orders.	Dem. Rep. F.L. Prog.	No record vote		49 12 1 1	4 8	July 5, 1935
Social Security Act. Created social security board to administer old age benefits based on earnings before the age of 65; unemployment administered under state laws and grants to states to aid the needy aged, blind, orphans, widows, etc.		372	33	76	6	Aug. 14, 1935
Glass-Steagall Banking Act. Increased power of Federal Reserve Board of Governors over open market and credit transactions.		No record vote		No record vote		Aug. 23, 1935
Public Utilities Act (Wheeler-Rayburn Act). Required all public utilities to register with the SEC and limited utility holding corporations to first degree unless necessity required greater complexity.	Dem. Rep. F.L. Prog.	203 7 3 6	59 83	No record vote		Aug. 26, 1935
Farm Mortgage Moratorium Act. Allowed three-year moratorium on foreclosures with court permission upon payment of reasonable rental.		No record vote		No record vote		Aug. 29, 1935
Soldiers' Bonus Bill. Made 9-year 3-per cent bonds redeemable on demand.	Dem. Rep. F.L. Prog.	265 72 3 6	29 30	56 15 2 1	9 7	Vetoed, Jan. 24, 1936
		(Reconsideration vote)				
	Dem. Rep. F.L. Prog.	248 66 3 7	32 29	57 16 2 1	12 7	Jan. 27, 1936
Soil Conservation and Domestic Allotment Act. Granted payments to farmers who let their land lie fallow or planted cover crops.	Dem. Rep. F.L. Prog.	246 20 1 ...	25 64 1 7	49 5 1 1	9 11	Mar. 2, 1936
Reciprocal Trade Agreement Act. Extended to June, 1940, period during which President is authorized to negotiate foreign trade under Trade Agreements Act of 1934.		284	0	58	24	Mar. 1, 1937
Neutrality Act. Forbade export of arms and ammunition to belligerents, the sale in this country of belligerents' securities, the use of American ships for carrying munitions; required belligerents to pay upon purchase and carry all purchases in their own ships (cash and carry clause).		377	12	41	15	May 1, 1937

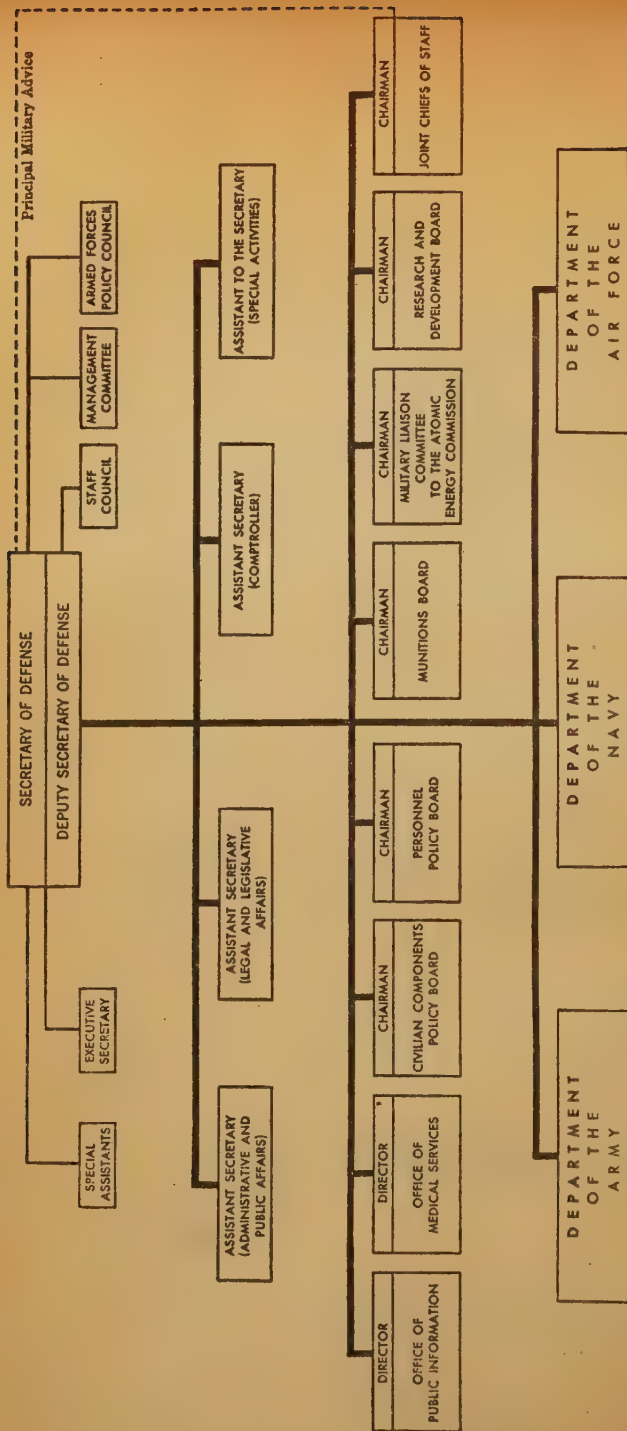
Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Judiciary Act. Allowed voluntary retirement of Supreme Court justices and other federal court judges on full pension at age of 70.		No roll-call vote		Unanimous, no roll-call vote		Aug. 25, 1937
National Housing Act. Established the U. S. Housing Authority to administer loans to local communities and states for rural and urban construction. (Amended in 1938.)		275	86	64	16	Sept. 2, 1937
National Housing Act Amendment.	Dem. Rep. F.L. Prog. Ind.	No record vote		41 1	25 13 1 1 ..	Feb. 4, 1938
Agricultural Adjustment Act. Continued soil conservation program; provided parity payments and commodity loans to farmers; established crop insurance corporations and ever-normal granary plan.	Dem. Rep. F.L. Prog. Ind.	243 14 5 1 ...	54 74 ... 7 ...	53 2 1	17 11 2 1 ..	Feb. 16, 1933
Wage and Hours Act. Provided minimum wage of 25 cents to rise to 40 cents after 6 years; limited hours from 44 per week the first year to 40 after the third year; goods produced by "oppressive child labor" could not be shipped in interstate commerce.	Dem. Rep. F.L. Prog.	247 31 5 7	41 48	No record vote		June 25, 1938
Reciprocal Trade Agreement Act. Extended Trade Agreements Act of 1937 three more years.	Dem. Rep. F.L. Prog. Ind. A.L.	212 5 1	20 146 1 1	41 1 ..	15 20 2	Apr. 12, 1940
Selective Service Act. Established system for compulsory service in armed forces. (Extended in 1941.)	Dem. Rep. F.L. Prog. Ind. A.L.	211 52	33 112 1 2 ... 1	50 8	17 10 2 1 1 ..	Sept. 16, 1940
Lend-Lease. Provided system whereby U. S. lent goods and munitions to democratic nations in return for services and goods.		260	165	60	31	Mar. 11, 1941
Selective Service Act Extension. Extended period of service to not more than 30 months in time of peace and eliminated 900,000-man limit of Army.	Dem. Rep. Prog. A.L.	182 21	65 133 3 1	38 7	16 13 1 ..	Aug. 18, 1941
Declarations of World War II: Against Japan.	Dem. Rep. Prog. Ind. A.L.	235 149 3 ... 1	... 1	56 24 1 1 ..	.. .. .. .. ..	Dec. 8, 1941
Against Germany.		393	0	88	0	Dec. 11, 1941
U. N. Charter Ratification.	Dem. Rep. Prog.	No vote required		53 35 1	.. 2 ..	July 28, 1945
Case Bill. Would have set up mediation board, established enforceable 30-day cooling-off periods in labor disputes, outlawed boycotts and sympathy strikes, and authorized court injunctions.	Dem. Rep. Prog. A.L.	97 133	91 13 1 1	33 28	13 6 1 ..	Vetoed, June 11, 1946
		(Reconsideration vote)		No vote required		
	Dem. Rep. Prog. A.L.	96 159	118 15 1 1	No vote required		Defeated, June 11, 1946
British Loan Act. Established \$3,750,000,000 credit to Britain, including \$650,000,000 in lend-lease.	Dem. Rep. Prog. A.L.	157 61 ... 1	32 122 1 ...	29 17	15 18 1 ..	July 15, 1946

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Atomic Energy Commission. Created five-man controlled commission without military representation but with military liaison; permitted Army and Navy to make atomic weapons; forbade distribution of fissionable materials or atomic energy information.		No record vote		No record vote		Aug. 1, 1946
Greek-Turkey Aid Bill. Authorized \$400,000,000 to furnish aid to Greece and Turkey upon application, subject to withdrawal upon request of countries, of the U. N. Security Council or General Assembly, or of President if improperly used or unnecessary.	Dem.	160	13	32	7	May 22, 1947
	Rep.	127	93	35	16	
	A.L.	...	1	..	..
Treaty Ratifications:						
With Italy.	Dem. Rep.	No vote required		37	3	June 14, 1947
With Rumania.		No vote required		42	7	June 14, 1947
With Bulgaria.		No vote required		Voice vote approval		June 14, 1947
With Hungary.		No vote required		Voice vote approval		June 14, 1947
Income Tax Reduction Bill. Would have reduced income tax rates on a sliding scale, ranging from 10.5 to 30 per cent on July 1, 1947.	Dem.	37	97	6	26	Vetoed, June 16, 1947
	Rep.	183	1	42	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				
	Dem. Rep. A.L.	35 233 ...	134 2 1	No vote required		Defeated, June 17, 1947
Taft-Hartley Bill (Labor-Management Relations Act, 1947). Prohibits closed shops but allows union shops by secret vote of majority of employees; makes unions subject to damage suits for unfair labor practices, such as boycotts or jurisdictional strikes; requires unions to file financial reports; requires union leaders to file statements that they are not Communistic.	Dem.	103	66	17	15	Vetoed, June 20, 1947
	Rep.	217	12	37	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				
	Dem. Rep. A.L.	106 225 ...	71 11 1	20 48 ..	22 3 ..	June 23, 1947
Rent Control Bill. Continued federal rent control to Feb. 29, 1948, but permitted 15 per cent increase if mutually agreed to by tenant and landlord for lease running to Dec. 31, 1948 (leases once signed take property out of rent control); decontrolled non-residential buildings.		163	73	Voice vote approval		June 30, 1947
Presidential Succession Act. Made Speaker of House and President of Senate pro tempore next in line after Vice President.		365	11	50	35	July 18, 1947
Income Tax Reduction Bill (Second Version). Same provisions as first bill but with effective date changed to Jan. 1, 1948.	Dem.	69	109	12	30	Vetoed, July 18, 1947
	Rep.	233	2	48	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				
	Dem. Rep. A.L.	63 236 ...	105 2 1	10 47 ..	33 3 ..	Defeated, July 18, 1947
National Security Act of 1947. Reorganized and co-ordinated armed forces under National Military Establishment headed by Secretary of Defense (of Cabinet rank) and including Secretaries of the Army, the Navy and the Air Force.		Voice vote approval		Voice vote approval		July 26, 1947
Rent Control Bill. Extended controls through Mar. 31, 1949; provided Emergency Court of Appeals to decide on decontrols or increases recommended by local boards but rejected by Federal Housing Expediter.		220	95	Voice vote approval		Mar. 30, 1948
Income Tax Reduction Bill. Provided \$4.8 billion reduction in nation's income taxes, effective May 1 and retroactive to Jan. 1.	Dem.	84	64	30	11	Vetoed, Apr. 2, 1948
	Rep.	205	0	48	0	
	A.L.	0	2	..	..
		(Reconsideration vote)				
	Dem. Rep. A.L.	82 229 0	84 2 2	27 50 ..	10 0 ..	Apr. 2, 1948

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Foreign Assistance Act of 1948. Authorized \$5.3 billion 1-year European Recovery Program, \$275 million for military aid to Greece and Turkey, \$463 million in economic and military aid for China, \$60 million for U. N. Fund for Children.	Dem. Rep. A.L.	150 167 0	11 62 2	Voice vote approval		Apr. 3, 1948
Air Force and Navy Aircraft Bill. Appropriated \$3,198,100,000 for 70-group Air Force and expansion of naval aviation.		Voice vote approval		Voice vote approval		May 21, 1948
Selective Service Act. Provided for registration of all men 18-25 and induction of enough men 19-25 to maintain Army of 837,000, Navy and Marine Corps of 666,882, and Air Force of 502,000.		259	136	Voice vote approval		June 24, 1948
Displaced Persons Bill. Admitted 205,000 European displaced persons, including 3,000 orphans.		Voice vote approval		Voice vote approval		June 25, 1948
Foreign Aid Appropriations. Appropriated funds for 1 year: \$5.055 billion for ERP, \$400 million for China, \$1.3 billion for occupied areas, \$225 million for Greece and Turkey, \$35 million for U. N. Fund for Children, \$70,710,228 for IRO.		318	62	Voice vote approval		June 28, 1948
Housing Bill. Authorized Federal loans for private construction of low-cost homes and apartments; liberalized loans to manufacturers of prefabricated houses.		351	9	Voice vote approval		Aug. 10, 1948
U. N. Loan. Authorized loan of \$65 million for building U. N. permanent headquarters in New York City.		164	27	No record vote		Aug. 11, 1948
Bill to raise salaries: President's, \$75,000 to \$100,000 with new \$50,000 tax-free allowance; Vice President's and Speaker's, \$20,000 to \$30,000 with \$10,000 tax-free allowance.	Dem. Rep. A.L.	Voice vote approval		42 26 ..	0 9 ..	Jan. 19, 1949
Rent-control bill. Extended controls through June 30, 1950; permitted states and localities to end curbs before that time with consent of governor.	Dem. Rep. A.L.	196 66 1	48 95 0	52 26 ..	0 11 ..	Mar. 30, 1949
ERP authorization: \$5,430,000,000 for European recovery, consisting of \$1,150,000,000 for April-June and \$4,280,000,000 for fiscal year starting July 1.		Voice vote approval		Voice vote approval		Apr. 19, 1949
Housing and slum-clearance bill. Provided for 810,000 dwelling units in 6 years, 5-year slum-clearance program, \$325,000,000 in loans and grants for farm housing aid.		Voice vote approval		Voice vote approval		July 15, 1949
National Security bill. Changed National Military Establishment to executive Department of Defense; made Departments of Army, Navy and Air Force "military departments."		356	7	Voice vote approval		Aug. 10, 1949
Military Assistance Program. Authorized \$1,314,010,000 in military aid: for Atlantic Pact countries, \$1 billion; Greece and Turkey, \$211,370,000; "general area" of China, \$75,000,000; and South Korea, Iran and Philippines, \$27,640,000.	Dem. Rep. A.L.	172 51 0	24 84 1	Voice vote approval		Oct. 28, 1949
Foreign-aid appropriations: \$5,809,990,000, consisting of \$4,852,380,000 for ERP, \$912,500,000 for Army-occupied areas, \$45,000,000 for Greek-Turkish aid, and \$110,000 for joint Congressional Foreign-Aid Committee.		Voice vote approval		Voice vote approval		Oct. 2, 1949
Minimum-wage bill. Raised minimum wage from 40c to 75c an hour.		131	19	Voice vote approval		Oct. 26, 1949
Appropriations to support Military Assistance Program.		No record vote		Voice vote approval		Oct. 29, 1949
Farm bill. Supported prices for wheat, corn, cotton, rice, peanuts at 90% of parity through 1950, 80-90% through 1951, and 75-90% on sliding-scale basis thereafter.		175	34	46	7	Oct. 31, 1949

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Bill to repeal federal taxes on oleomargarine.		262	106	59	20	Mar. 16, 1950
Natural-gas bill (Kerr bill). Would have prevented FPC control on prices for natural gas distributed by interstate pipelines.		176	174 (No reconsideration vote)	44	38	Vetoed Apr. 15, 1950
Housing bill. Authorized over \$3.5 billion in government loans and mortgage insurance for expansion of housing program. Also turned over to state and local authorities about 150 wartime and veterans' housing projects.		Voice vote approval		Voice vote approval		Apr. 20, 1950
Displaced persons bill. Extended 1948 act to June 30, 1951; increased authorized entry from 205,000 to 341,000; and eliminated discriminatory provisions.		Voice vote approval		49	25	June 16, 1950
Rent-control bill. Extended federal control to Dec. 31, 1950, and for 6 months longer in communities wanting it.	Dem. Rep. A.L.	150 25 1	39 106 0	30 10 ...	18 6 ...	June 23, 1950
Draft-extension bill. Extended registration and classification for draft to July 9, 1951; authorized President to call National Guard and organized reserves for 21-mo. service.		315	4	76	0	June 30, 1950
Bill to increase Air Force and Army. Expanded Air Force to 70 groups and from 410,000 to 502,000 men; expanded Army from 592,000 to 837,000 men.		315	4	76	0	July 11, 1950
Social Security bill. Will raise present employer's and employee's 1½% payroll tax to 2% in 1954, 2½% in 1960, 3% in 1965, and 3½% in 1970; provided financial aid to permanently disabled persons in need.		374	1	Voice vote approval		Aug. 28, 1950
Omnibus appropriations bill. Appropriated \$35.554 billion, including \$62.5 million loan to Spain, \$14,680,084,443 for Defense Dept., \$1.225 billion for rearming Western Europe, \$2.526 billion for Marshall plan, \$26.9 million for Point-4 program.		Voice vote approval		Voice vote approval		Sept. 6, 1950
Defense Production Act of 1950. Gave President power to curb prices, wages, and consumer credit, and to increase defense production.		Voice vote approval		Voice vote approval		Sept. 8, 1950
Bill to draft doctors, dentists, etc., up to 50 years of age, for 21-mo. service.		Voice vote approval		Voice vote approval		Sept. 9, 1950
Internal Security Act of 1950. Provided for registering of Communists and their internment in times of emergency.	Dem.	186	18	24	6	Vetoed Sept. 22, 1950
	Rep.	126	1	27	1	
	A.L.	0	1	...	...	(Reconsideration vote)
	Dem.	161	45	26	10	Sept. 23, 1950
	Rep.	125	2	31	0	
	A.L.	0	1	...	...
Tax-increase bill. Raised income taxes about 17%, corporation taxes about 15%; imposed 10% excise tax on TV sets and quick-freeze units.		328	7	Voice vote approval		Sept. 23, 1950
Emergency defense-appropriations bill. Appropriated \$17,-099,902,285, including \$3.734 billion for Navy, \$3.166 billion for Army, \$260 million for atomic-weapon research, etc.		286	30	Voice vote approval		Sept. 27, 1950

ORGANIZATION DEPARTMENT OF DEFENSE



THE UNITED STATES ARMED SERVICES

THE UNITED STATES MILITARY ACADEMY

Source: U. S. Military Academy.

Established by an Act of Congress on Mar. 16, 1802, the U. S. Military Academy opened on July 4, 1802, at West Point, N. Y., with fewer than a dozen cadets. In 1812, 250 cadets were appointed, and a regular curriculum was established.

The present 2500 cadets include:

- 4 from each Congressional district
- 8 from each State at large
- 4 each from Hawaii and Alaska
- 6 from the District of Columbia
- 4 natives from Puerto Rico
- 2 from the Panama Canal Zone
- 3 recommended by the Vice President
- 40 graduates of "honor military schools"
- 40 sons of veterans of World Wars I or II who died as a result of war service
- 89 sons of members of the Regular Army, Navy or Marine Corps
- 180 from the Regular Army and National Guard

4 from the Republic of the Philippines

All appointments are made by the President upon recommendation of the respective nominating authorities.

Candidates must be between the ages of 17 and 22, unmarried, and able to meet the mental, physical and physical aptitude requirements. They may satisfy the educational requirements by taking the regular entrance examinations, by presenting acceptable secondary school certificates and passing special examinations in English and mathematics, or by presenting certificates showing completion of at least one semester of acceptable college work.

A cadet receives \$936 for each of his four years at the Military Academy. Upon graduation with a degree of Bachelor of Science, he is commissioned as a second lieutenant and must serve for at least three years.

THE UNITED STATES NAVAL ACADEMY

Source: U. S. Naval Academy.

On October 10, 1845, the Naval School was established at Fort Severn, Annapolis, Maryland. Five years later it was renamed the United States Naval Academy, and the following year a regular four-year course was adopted. At present, the curriculum consists of courses in the following departments: executive; seamanship and navigation; ordnance and gunnery; marine engineering; aviation; electrical engineering; mathematics; English, history and government; foreign languages; hygiene; and physical training.

Candidates are selected as follows:

- 5 from the District of Columbia

40 sons of men and women killed in action or who have died, or may hereafter die of wounds or injuries, or disease contracted, in active service in World Wars I and II

75 annually from among sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard.

160 enlisted Navy and Marine personnel selected annually by competitive examination

160 annually chosen by the Secretary of the Navy from the Naval and Marine Corps Reserves

5 Puerto Ricans chosen by the Resident Commissioner of Puerto Rico

1 on the recommendation of the Governor of Puerto Rico

4 Filipinos designated by the President of the United States

1 from the Canal Zone

20 annually from schools designated by the Army and Navy as honor schools and from NROTC schools.

20 from the American republics and the Dominion of Canada

Unlimited: Sons of persons who have been or shall hereafter be awarded the Congressional Medal of Honor.

Each Senator, Representative, delegate to Congress, and the Vice President may have not more than 5 Midshipmen at the Naval Academy. The President selects the 5 from the District of Columbia, the 40 sons of deceased veterans of World Wars and the 75 sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard. The President also appoints the sons of holders of the Medal of Honor.

Candidates for admission must be between 17 and 22 years of age on July 1 of their entering year. They may qualify by taking entrance examination, by presenting an acceptable secondary school certificate and taking special examinations in English and mathematics, or by completing a sufficient number of acceptable college courses. Candidates must also meet the physical requirements and must be unmarried.

Midshipmen are paid \$936 a year. Graduates of the Naval Academy are granted Bachelor of Science degrees and are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps. In addition, at the present time, a limited number of the members of graduating classes may be commissioned in the U. S. Air Force.

THE U. S. COAST GUARD ACADEMY

Source: U. S. Coast Guard Academy.

On July 31, 1876, the Coast Guard Acad-

emy, then known as the "School of Instruction" of the Revenue Cutter Service, was established by law.

The schooner J. C. DOBBIN was first used as a school ship, later being succeeded in 1878 by the CHASE. In 1890 the CHASE established winter quarters at Curtis Bay, South Baltimore, Maryland, and in 1907 was superseded by the ITASCA. In 1910 the School was moved to New London. In 1914, the school was named the Revenue Cutter Academy. The following year, when the Revenue Cutter Service was merged with the Life Saving Service to form the Coast Guard, the present name of Coast Guard Academy was established. In 1932, the Coast Guard Academy was moved from Fort Trumbull to another site in New London, where it has remained to this day.

The Academy is accredited by the Association of American Universities and grants the degree of Bachelor of Science in Marine Engineering to each graduate. The curriculum includes mathematics, physics, marine engineering, seamanship, navigation, history, literature, naval architecture, and other engineering courses.

Candidates must be between 17 and 22 years of age, physically sound, unmarried, and at least 5'6" tall. They must agree to remain unmarried until graduation and to serve at least 4 years after graduation. Cadets are paid \$936 a year and are commissioned as ensigns in the Coast Guard upon graduation.

U. S. MERCHANT MARINE ACADEMY

Source: U. S. Merchant Marine Academy.

The U. S. Merchant Marine Cadet Corps was established Mar. 15, 1938, and its Academy is located on the south shore of Long Island Sound at Kingspoint, N. Y. The Academy has a complement of 1,000 cadet-midshipmen representing every U. S. state., D. C., Alaska, the Canal Zone, Hawaii, and Puerto Rico. In addition, it is authorized to receive each year, for the full period of training, 50 Filipinos and not more than 12 candidates from Latin American republics.

Appointments to the Academy are governed by a state and territory quota system, based on population, and are made through competitive examinations. A candidate must be an unmarried citizen between the ages of 17 and 21, with exceptions granted to veterans. He must have 15 high-school credits, including 1 unit in algebra, 1 in plane geometry, 1 in physics, and 3 in English.

The course is 4 years, consisting of 1 year as Fourth Classman at the Academy, 1 year as Third Classman aboard a merchant ship, and 2 years as Second and First Classman at the Academy. Study includes marine engineering, navigation, electricity, ship construction, naval science and tac-

tics, economics, business, languages, history, and other subjects.

On completion of their courses, cadet-midshipmen are examined for their original Merchant Marine license as deck or engineer officers in any ship in the U. S. Merchant Marine. They also receive Bachelor of Science degrees and commissions as officers in the U. S. Maritime Service and the U. S. Naval Reserve. Over 9,000 officers have been graduated from the Cadet Corps and its Academy.

History of the Armed Services

Source: Encyclopaedia Britannica.

U. S. ARMY

When Gen. Washington, on July 3, 1775, took command of the Colonial militia (about 8,000 men) besieging Boston, the event marked the union of the forces of the 13 separate Colonies under one head, and the U. S. Army was born. In Jan., 1776, the Continental Congress decided that these troops should be separate in organization from those of local communities and established them as the U. S. Regular Army. When these forces were disbanded after the war only some 80 officers and men were retained to guard U. S. Army stores. From this humble beginning, in the ensuing years, the strength of the U. S. Army rose or fell according to national and international conditions. A peak strength of over 7,000,000 was reached in World War II.

U. S. NAVY

In Sept. and Oct., 1775, Gen. Washington maintained 5 schooners and a sloop with officers and men from his army for the purpose of preying on inbound English supply vessels and thereby caused the birth of the U. S. Navy. In Dec., 1775, the Continental Congress expanded this by providing for construction of naval craft and the appointment of a marine committee (one member from each colony) which continued until 1794 when further ships and manpower were provided for by act of Congress. Upon completion of these ships in 1798, a Navy Department was established as the controlling agency, and the secretary given Cabinet rank.

U. S. AIR FORCES

Until the establishment, on July 26, 1947, of the Department of Defense which united the services under one command, U. S. military air forces operated under the several commands. In the Army, operations came under the Signal Corps until 1918, when the U. S. Air Service was established. In 1926, the U. S. Air Corps came into being and remained until 1942 when the name was changed to the U. S. Air Forces.

In the Navy, ship-based fighters and bombers were originally attached to the

several fleets and under the orders of the fleet commanders.

Marine Corps aviation came under control of the Navy.

With the establishment of the Defense Department, in 1947, the air arm was given equal rank with the ground and sea forces.

U. S. COAST GUARD

This service was originally created by an act of Congress approved on Jan. 28, 1915, which combined the then Revenue Cutter Service and the Life-Saving Service. On July 1, 1939, the Lighthouse Service of the Department of Commerce was also consolidated into this unit. The Coast Guard, through its antecedents, is the oldest organization under the Federal government and, until the Navy Department was established in 1798, it served as the only U. S. armed force afloat. It operates under the

Treasury Department in time of peace, serving in the capacity of life and property saving, prevention of smuggling, clearance of debris in harbors, maintaining an ice patrol in northern waters, flood service, etc. In time of war it is attached to the Navy Department, and in the recent conflict, it performed useful and admirable service.

U. S. MARINE CORPS

Founded in 1775 and observing its official birthday on Nov. 10, the U. S. Marine Corps was developed to provide the Navy with a trained land-fighting force. This unit has been used successfully in every U. S. war beginning with the Revolution when it consisted of 2 battalions. It reached its high in achievement in the recent war when its some 400,000 men and officers performed historic deeds in the Pacific Theater of Operations.

Armies of the World

Source: *Encyclopaedia Britannica*

Country	Army personnel ¹	Year	Country	Army personnel ¹	Year
Albania.....	60,000	(?)	Iran.....	90,000	(?)
Argentina.....	100,000	1950	Italy.....	250,000	(?)
Australia.....	20,000	(?)	Mexico.....	50,000	1950
Belgium.....	67,360 ⁴	1949	Netherlands.....	175,000	1949
Brazil.....	118,000	1948	New Zealand.....	11,000	(?)
Bulgaria.....	55,000	(?)	Norway.....	15,000	1947
Canada.....	17,187 ⁴	1949	Pakistan.....	250,000	1949
Chile.....	25,000	1948	Poland.....	250,000	1949
China (Communist).....	4,500,000	1950	Portugal.....	61,000	1949
China (Nationalist).....	300,000	1950	Rumania.....	125,000	(?)
Czechoslovakia.....	160,000	(?)	South Africa, U. of.....	4,640	(?)
Denmark.....	12,000	(?)	Spain.....	450,000	(?)
Egypt.....	160,000	(?)	Sweden.....	60,000	(?)
Finland.....	34,400	(?)	Turkey.....	650,000	(?)
France.....	465,000	1949	U.S.S.R.....	3,000,000	1949
Greece.....	132,000	1948	United Kingdom.....	400,000	1949
Hungary.....	65,000	(?)	United States.....	591,700	1950
India.....	400,000	1948	Yugoslavia.....	350,000	1948

¹ Estimated, unless otherwise indicated. ² Not specified. ³ Stabilized peacetime army. ⁴ Official figure. ⁵ Fixed by 1947 peace treaty.

Selective Service Classifications

I-A: Available for immediate service.

I-A-O: Conscientious objector available for non-combatant military service.

I-C: Members of the armed forces, Coast Guard, Coast and Geodetic Survey or Public Health Service or certain registrants separated therefrom.

I-D: Members of reserve components or student taking military training.

II-A: Registrant deferred because of civilian occupation (except agriculture).

II-C: Deferred because of agricultural occupation.

III-A: Registrant with dependents.

IV-A: Registrant who has completed service; sole surviving son of parents whose other child or children died in World War II.

IV-B: Officials deferred by law.

IV-C: Aliens.

IV-D: Ministers of religion or divinity students.

IV-E: Conscientious objectors opposed to combatant and non-combatant training and service.

IV-F: Physically, mentally or morally unfit.

U. S. Armed Forces Monthly Pay Rates for Officers

Source: Department of Defense, Public Information Office.

Army, Air Force and Marine Corps	Rank	Pay grade	Monthly pay	Monthly allowances for quarters	
				With dependents	With no dependents
General of the Army	Fleet Admiral	O-8	\$926.25	\$150.00	\$120.00
General	Admiral	O-8	926.25	150.00	120.00
Lieutenant General	Vice Admiral	O-8	926.25	150.00	120.00
Major General	Rear Admiral (upper half)	O-8	926.25	150.00	120.00
Brigadier General	Rear Admiral (lower half) and Commodore	O-7	769.50	150.00	120.00
Colonel	Captain	O-6	570.00	120.00	105.00
Lieutenant Colonel	Commander	O-5	456.00	120.00	90.00
Major	Lieutenant Commander	O-4	384.75	105.00	82.50
Captain	Lieutenant	O-3	313.50	90.00	75.00
First Lieutenant	Lieutenant (junior grade)	O-2	249.38	82.50	67.50
Second Lieutenant	Ensign	O-1	213.75	75.00	60.00
Chief Warrant Officer (appt. by Sec. of Army)	Chief Warrant Officer	W-4	320.10	105.00	82.50
Same	Same	W-3	291.00	90.00	75.00
Chief Warrant Officer	Same	W-2	254.63	82.50	67.50
Warrant Officer (junior grade)	Warrant Officer	W-1	210.98	75.00	60.00

Special Pay for Longevity

(Amounts listed below are monthly increases in the basic pay for longevity of service)

O-8 — \$28.50 after 30 years.	O-1 — \$14.25 after 2, 4, 6, 8, 10, 12, and 14 years.
O-7 — \$28.50 after 26 and 30 years.	W-4 — \$14.55 after 6, 8, 10, 12, 14, 16, 18, 22, 26 and 30 years.
O-6 — \$14.25 after 16 years; \$28.50 after 18, 22, 26 and 30 years.	W-3 — \$7.275 after 6, 8, 10, 12, 14 and 16 years; \$14.55 after 18, 22, 26 and 30 years.
O-5 — \$14.25 after 12, 14 and 16 years; \$28.50 after 18, 22 and 26 years.	W-2* — \$7.275 after 8, 10, 12, 14 and 16 years; \$14.55 after 18, 22, 26 and 30 years.
O-4 — \$14.25 after 8, 10, 12, 14, 16, 22 and 26 years; \$28.50 after 18 years.	W-1† — \$7.275 after 8, 8, 10, 12, 14, and 16 years; \$14.55 after 18, 22 and 26 years.
O-3 — \$14.25 after 4, 6, 8, 10, 12, 14, 16, 18 and 22 years.	
O-2 — \$14.25 after 2, 4, 6, 8, 10, 12 and 14 years.	

* For figuring increases, use \$254.625 for original basic pay. † For figuring increases, use \$210.975 for original basic pay.

Insignia and Ranks of the Armed Forces

Army		Navy	
Insignia	Rank	Insignia	Rank
Five stars	General of the Army	Five stars	Fleet Admiral
Four stars	General	Four stars	Admiral
Three stars	Lieutenant General	Three stars	Vice Admiral
Two stars	Major General	Two stars	Rear Admiral
One star	Brigadier General	One star	Commodore
Silver eagle	Colonel	Silver eagle	Captain
Silver maple leaf	Lieutenant Colonel	Silver maple leaf	Commander
Gold maple leaf	Major	Gold maple leaf	Lt. Commander
Two silver bars	Captain	Two silver bars	Lieutenant
One silver bar	First Lieutenant	One silver bar	Lieutenant (jg)
One gold bar	Second Lieutenant	One gold bar	Ensign
Gold bar with rounded ends, brown-enamel top, longitudinal center of gold (3/4" wide x 1" long)	Chief Warrant Officer	Warrant specialty in silver	Chief Warrant Officer
Same as Chief Warrant Officer but with latitudinal center of gold	Warrant Officer (jg)	Warrant specialty in gold	Warrant Officer

U. S. Armed Forces Monthly Pay Rates for Enlisted Personnel

Source: Department of Defense, Public Information Office.

Army rank	Navy rank	Air Force rank	Pay grade	Monthly pay	Monthly allowances for quarters	
					With dependents	With no dependents
Master Sgt. & 1st Sgt.	Chief	Master Sgt. & 1st Sgt.	E-7	\$198.45	\$67.50	\$45.00
Sergeant First Class	Mate First Class	Technical Sergeant	E-6	169.05	67.50	45.00
Sergeant	Mate Second Class	Staff Sergeant	E-5	139.65	67.50	45.00
Corporal	Mate Third Class	Sergeant	E-4	117.60	45.00*	45.00*
Private First Class	Seaman	Corporal	E-3	95.55	45.00	45.00
Private	Seaman Apprentice	Private First Class	E-2	82.50	45.00	45.00
Recruit†	Seaman Recruit†	Private†	E-1	80.00	45.00	45.00
Recruit‡	Seaman Recruit‡	Private‡	E-1	75.00	45.00	45.00

* Those enlisted personnel in E-4 category with over 7 years' service receive \$67.50 monthly allowance for quarters if quarters are not furnished. The law considers them (as well as all the lower categories) as being without dependents with less than 7 years' service. † With over 4 months' service. ‡ With less than 4 months' service.

Special Pay for Longevity

(Amounts listed below are monthly increases in the basic pay for longevity of service)

E-7—\$7.35 after 4, 6, 8, 10, 12, 14 and 16 years; \$14.70 after 18, 22 and 26 years.

E-6—\$7.35 after 4, 6, 8, 10, 12, 14 and 16 years; \$14.70 after 18 and 22 years.

E-5—\$7.35 after 2, 4, 6, 8, 10, 12, 14 and 16 years; \$14.70 after 18 and 22 years.

E-4—\$7.35 after 2, 4, 6, 8, 10, 12, 14 and 16 years; \$14.70 after 18 years.

E-3—\$7.35 after 2, 4, 6, 8, 10, 12 and 14 years.

E-2—\$7.50 after 2, 4, 6, 8, and 10 years.

E-1—\$7.50 after 2 and 4 years.

HAZARDOUS DUTY

Members of the uniformed services are entitled to receive incentive pay for the performance of hazardous duty required by competent orders under the following conditions: (1) duty as a crew member involving frequent and regular participation in aerial flight; (2) duty on board a submarine; (3) duty involving frequent and regular participation in aerial flights not as a crew member; (4) duty involving frequent and regular participation in glider flights; (5) duty involving parachute jumping as an essential part of military duty; (6) duty involving intimate contact with persons afflicted with leprosy; (7) duty involving the demolition of explosives as a primary duty; (8) duty at a submarine escape training tank; (9) duty at the Navy Deep Sea Diving School or the Navy Experimental Diving Unit.

ALLOWANCES FOR SUBSISTENCE

Officers receive \$42.00 per month. Enlisted personnel receive allowances for subsistence under the following provisions: (1) when rations in kind are not available, \$2.25 per day; (2) when permission to mess separately is granted, \$1.05 per day; (3) when assigned to duty under emergency conditions where no government messing facilities are available, up to and not to exceed \$3.00 per day.

SEA AND FOREIGN DUTY

Pay grade	Monthly rates	Pay grade	Monthly rates
E-7.....	\$22.50	E-3.....	\$9.00
E-6.....	20.00	E-2.....	8.00
E-5.....	16.00	E-1.....	8.00
E-4.....	13.00		

U. S. Navy Combatant Vessels*

	Atlantic	Pacific
Carriers.....	4	3
Light carriers and carrier escorts....	6	2
Battleships.....	1	0
Cruisers.....	7	6
Destroyers and destroyer escorts....	86	51
Submarines.....	45	27
Amphibious craft.....	55	36
Mine and patrol ships.....	64	35
Auxiliaries.....	90	100
Total.....	358	260

* Commissioned; as of July 1, 1950. † In addition, there are 28 commissioned vessels in Military Sea Transportation Service. NOTE: Excludes service craft and miscellaneous vessels assigned to Naval District River Command and overseas bases and under lease or loan.

Pay grade	Monthly rate	Pay grade	Monthly rate
O-8.....	\$150.00	W-2.....	\$100.00
O-7.....	150.00	W-1.....	100.00
O-6.....	210.00	E-7.....	75.00
O-5.....	180.00	E-6.....	67.50
O-4.....	150.00	E-5.....	60.00
O-3.....	120.00	E-4.....	52.50
O-2.....	110.00	E-3.....	45.00
O-1.....	100.00	E-2.....	37.50
W-4.....	100.00	E-1.....	30.00
W-3.....	100.00		

WORLD WAR II CASUALTIES TO THE OTHER NATIONS

NOTE: The information included in the table below was gathered from letters from official sources and from official and semiofficial documents. The British Commonwealth figures are official. U. S. figures are to be found elsewhere in this section.

Country	Killed	Wounded	Missing	Prisoners of war	Total
The Axis Nations					
Austria.....	340,000	.....	11,500,000*	.....	11,840,000
Bulgaria.....	30,000	.....	.....	.....	30,000
Germany.....	3,250,000	7,250,000	12,900,000*	.....	23,400,000
Hungary.....	70,000	.....	.....	.....	70,000
Italy.....	722,000	2,305,500	1,044,000*	.....	4,071,500
Japan.....	1,471,000	2,191,000	6,115,000*	.....	9,777,000
Rumania.....	63,000	.....	137,000*	.....	200,000
The United Nations					
Belgium.....	38,000	121,000	71,000*	.....	230,000
Brazil.....	451	2,722	23	35	3,231
British Commonwealth:					
Australia.....	23,365	39,803	6,030	26,363	95,561
Canada.....	37,476	53,174	1,843	9,045	101,538
Colonies.....	6,877	6,972	14,208	8,115	36,172
India.....	24,338	64,354	11,754	79,489	179,935
New Zealand.....	10,033	19,314	2,129	8,453	39,929
South Africa, U. of.....	6,840	14,363	1,841	14,589	37,633
United Kingdom.....	244,723	277,090	53,039	180,405	755,257
Total.....	353,652	475,070	90,844	326,459	1,246,025
China.....	3,211,418†	.....	.....	.....	3,211,418
Czechoslovakia.....	6,683	8,017	1,581	1,705	17,986
Denmark.....	3,000	.....	.....	.....	3,000
Finland.....	52,609	125,000	.....	.....	177,609
France.....	250,000	400,000	1,500,000*	.....	2,150,000
Greece.....	72,200	.....	.....	.....	72,200
Netherlands.....	9,600	20,000	25,000*	.....	54,600
Norway.....	7,000	.....	.....	.....	7,000
U. S. S. R.....	6,115,000	14,012,000	3,290,000*	.....	23,417,000
Yugoslavia.....	305,000	425,000	.....	170,000	900,000

* Includes prisoners of war. † Includes total dead, wounded and missing.

U. S. Armed Forces Personnel, 1934-50

Year	Army*	Air Force*	Navy	Marines	Coast Guard	Men†	Women
1934.....	137,584	.....	92,312	16,361	9,985	245,299	958
1935.....	138,569	.....	95,053	17,260	10,303	249,947	935
1936.....	166,724	.....	106,292	17,248	9,545	289,311	953
1937.....	178,733	.....	113,617	18,223	10,066	309,556	1,017
1938.....	184,126	.....	119,088	18,356	9,968	320,472	1,098
1939.....	188,565	.....	125,202	19,432	10,064	332,089	1,110
1940.....	267,767	.....	160,997	28,277	13,621	455,660	1,381
1941.....	1,460,998	.....	284,427	54,359	19,036	1,793,680	6,104
1942.....	3,074,184	.....	640,570	142,613	58,998†	3,902,112	14,253
1943.....	6,993,102	.....	1,741,750	308,523	154,976	9,068,994	129,357
1944.....	7,992,868	.....	2,981,365	475,604	169,264	11,400,450	218,651
1945.....	8,266,373	.....	3,380,817	474,680	171,518	12,018,974	274,414
1946.....	1,889,690	.....	983,398	155,592	29,736	2,970,688	57,992
1947.....	989,664	.....	486,245	92,222	18,972	1,548,472	19,659
1948.....	552,239	387,730	405,789	83,609	19,929	1,415,216	14,151
1949.....	658,694	419,347	448,500	86,000	23,326	1,594,481	18,060

* Prior to July 26, 1947, when the National Military Establishment was established, the Air Force was a part of the Army. † Not including the men in the Coast Guard during peacetime. ‡ From 1942 to and including 1945, the Coast Guard was part of the Navy; in peacetime it is attached to the Treasury Department.

NOTE: On June 30, 1950, the estimated strength of the Armed Forces was as follows: Army, 591,700; Air Force, 412,000; Navy, 380,600; Marines, 74,200.

Casualties of U. S. Wars for Army, Navy, and Marine Corps

Source: Department of Defense.

Wars	Branch of service	Numbers engaged	Killed in action	Died of wounds	Other deaths	Total deaths	Wounds not mortal	Total casualties
Revolutionary War 1775 to 1783	Army	(¹)	4,044 ²	.....	2,124	6,168 ³	6,004	12,172
	Navy	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....
	Total	.....	4,044	.....	2,124	6,168	6,004	12,172
War of 1812 1812 to 1814	Army	528,274 ⁴	1,950 ²	.....	.....	1,950 ²	4,000	5,950
	Navy	6,773	265	.....	.....	265	439	704
	Marines	1,155	45	.....	.....	45	66	111
	Total	536,202	2,260	.....	.....	2,260	4,505	6,765
Mexican War 1846 to 1848	Army	116,597	1,044	505	11,395	12,944	3,393	16,337
	Navy	11,129	1	.....	.....	1	3	4
	Marines	2,270	11	.....	.....	11	47	58
	Total	129,996	1,056	505	11,395	12,956	3,443	16,399
Civil War 1861 to 1865	Army	2,128,948	67,058	43,012	249,458	359,528 ⁵	280,040 ⁶	639,568
	Navy	57,841 ⁷	2,112	.....	2,411	4,523	1,710	6,233
	Marines	3,255 ⁸	108	.....	312	380	131	551 ⁹
	Total	2,190,044	69,278	43,012	252,181	364,431	281,881	646,352
Spanish-American 1898	Army	280,564	498	202	5,772	6,472	2,974	9,446
	Navy	22,875	10	.....	.....	10	47	57
	Marines	3,321	6	.....	.....	6	21	27 ⁹
	Total	306,760	514	202	5,772	6,488	3,042	9,530
Military Expeditions ¹⁰ 1899 to 1916	Army	131,468 ¹¹	863	253	3,269	4,385	3,007	7,392
	Navy	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....
	Total	131,468	863	253	3,269	4,385	3,007	7,392
World War I 1917 to 1918	Army	4,057,101	37,568	12,942	69,446	119,956	193,663 ¹²	313,619
	Navy	473,262	59	.....	6,975	7,034	292	7,326
	Marines	78,827	2,461	.....	823	3,284	9,505	12,789
	Total	4,609,190	40,088	12,942	77,244	130,274	203,460	333,734
World War II 1941 to 1945	Army	10,400,000	175,407	26,706	34,936	237,049	571,822	808,871
	Navy ¹³	4,424,557	36,088	985	27,228	64,301	33,729	98,030
	Marines	669,100	16,377	3,264	4,473	24,114	63,878	87,992
	Total	15,493,657	227,872	30,955	66,637	325,464	669,429	994,893
Total War Casualties 1775 to 1945 (170 years)	Army	17,642,952	288,432	83,620	376,400	748,452	1,064,903	1,813,355
	Navy	4,996,437	38,535	985	36,614	76,134	36,220	112,354
	Marines	757,928	19,008	3,264	5,608	27,880	73,648	101,528
	Total	23,397,317	345,975	87,869	418,622	852,466	1,174,771	2,027,237

¹ Greatest strength of Continental Army was about 35,000, November 1778.² Includes killed in action, died of wounds, and other deaths.³ Total number undoubtedly much larger, since records were incomplete.⁴ Represents enlistments; hence in excess of actual number of troops since reenlistments were counted as a term of service.⁵ Actual deaths larger since records of Confederates far from complete.⁶ Estimated on Union records but number believed to be considerably larger.⁷ Based on highest total for year 1865.⁸ Excludes 999 Confederate Marines of which 527 were casualties.⁹ Excludes 28 killed on the U.S.S. Maine.¹⁰ Philippine Insurrection, 1899 to 1902; Cuban pacification, 1906 to 1909; China Relief Expedition, 1900 to 1901; Mexican Border, 1911 to 1916; Punitive Expedition, 1916.¹¹ Approximately. Includes National Guard in Federal Service during Mexican border incidents.¹² Number incurred among 182,674 individuals, many having been wounded more than once.¹³ Coast Guard figures included with Navy; the total deaths were 1,917 and total casualties 2,892.

DECLARATIONS OF WAR

Address of the President of the United States before a joint session of the two Houses of Congress requesting that Congress declare that there exists a state of war between the United States and the Japanese Empire.

To the Congress of the United States:

Yesterday, December 7, 1941—a date which will live in infamy—the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan.

The United States was at peace with that Nation and, at the solicitation of Japan, was still in conversation with its Government and its Emperor looking toward the maintenance of peace in the Pacific. Indeed, one hour after Japanese air squadrons had commenced bombing in Oahu, the Japanese Ambassador to the United States and his colleague delivered to the Secretary of State a formal reply to a recent American message. While this reply stated that it seemed useless to continue the existing diplomatic negotiations, it contained no threat or hint of war or armed attack.

It will be recorded that the distance of Hawaii from Japan makes it obvious that the attack was deliberately planned many days or even weeks ago. During the intervening time the Japanese Government has deliberately sought to deceive the United States by false statements and expressions of hope for continued peace.

The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. Very many American lives have been lost. In addition, American ships have been reported torpedoed on the high seas between San Francisco and Honolulu.

Yesterday the Japanese Government also launched an attack against Malaya.

Last night the Japanese forces attacked Hong Kong.

Last night Japanese forces attacked Guam.

Last night Japanese forces attacked the Philippine Islands.

Last night the Japanese attacked Wake Island.

This morning the Japanese attacked Midway Island.

Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area. The facts of yesterday speak for themselves. The people of the United States have already formed their opinions and well understand the implications to the very life and safety of our Nation.

As Commander in Chief of the Army and Navy I have directed that all measures be taken for our defense.

Always will we remember the character of the onslaught against us.

No matter how long it may take us to overcome these premeditated invasions, the American people in their righteous might will win through to absolute victory.

I believe I interpret the will of the Congress and of the people when I assert that we will not only defend ourselves to the uttermost but will make very certain that this form of treachery shall never endanger us again.

Hostilities exist. There is no blinking at the fact that our people, our territory, and our interests are in grave danger.

With confidence in our armed forces—with the unbounded determination of our people—we will gain the inevitable triumph—so help us God.

I ask that the Congress declare that since the unprovoked and dastardly attack by Japan on Sunday, December 7, a state of war has existed between the United States and the Japanese Empire.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE
December 8, 1941.

Public Law 328—77th Congress

Joint Resolution

Declaring that a state of war exists between the Imperial Government of Japan and the Government and the people of the United States and making provisions to prosecute the same.

Whereas the Imperial Government of Japan has committed unprovoked acts of war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Imperial Government of Japan which has thus been thrust upon the United States is hereby formally declared;

and the President is hereby authorized and directed to employ the entire naval and military forces of the United States and the resources of the Government to carry on war against the Imperial Government of Japan; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 8, 1941, 4:10 P.M.,
E. S. T.

Message from the President of the United States transmitting a request that the Congress recognize a state of war between the United States and Germany, and between the United States and Italy.

To the Congress of the United States:

On the morning of December eleventh, the Government of Germany, pursuing its course of world conquest, declared war against the United States.

The long known and the long expected has thus taken place. The forces endeavoring to enslave the entire world now are moving towards this hemisphere.

Never before has there been a greater challenge to life, liberty, and civilization.

Delay invites greater danger. Rapid and united effort by all of the peoples of the

world who are determined to remain free will ensure a world victory of the forces of justice and of righteousness over the forces of savagery and of barbarism.

Italy also has declared war against the United States.

I therefore request the Congress to recognize a state of war between the United States and Germany, and between the United States and Italy.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE

December 11, 1941.

Public Law 331—77th Congress

Joint Resolution

Declaring that a state of war exists between the Government of Germany and the Government and the people of the United States and making provision to prosecute the same.

Whereas the Government of Germany has formally declared war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Government of Germany which has thus been thrust upon the United States is hereby formally declared; and the President is hereby authorized and directed to employ the entire naval and military forces

of the United States and the resources of the Government to carry on war against the Government of Germany; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 11, 1941, 3:05 P.M.,
E. S. T.

In similar wording, war was declared against the Government of Italy by Joint Resolution, Public Law 332, approved December 11, 1941, 3:06 P.M.

Declarations of War, Invasions and Surrenders of World War II

- | | |
|---|---|
| <p>1939 Sept. 1, Germany invades Poland.
Sept. 3, Great Britain and France declare war on Germany.
Nov. 30, Russia invades Finland.</p> | <p>Dec. 11, United States declares war against Germany and Italy.</p> |
| <p>1940 April 9, Germany invades Denmark and Norway.
May 10, Germany invades Holland, Belgium and Luxembourg.
May 16, Germany invades France.
June 10, Italy declares war on France and Great Britain.
Oct. 8, Germany invades Rumania.
Oct. 28, Italy invades Greece.</p> | <p>1942 May 22, Mexico declares war on Japan, Germany and Italy.
Aug. 22, Brazil declares war on Germany and Italy.</p> |
| <p>1941 April 6, Germany invades Yugoslavia and Greece.
June 22, Germany declares war on Russia.
Dec. 7, Japan bombs Pearl Harbor, declares war on U. S. and Gt. Brit.
Dec. 8, United States and Great Britain declare war against Japan.
Dec. 8, China declares war on Japan, Germany, and Italy.
Dec. 11, Germany and Italy declare war on the United States.</p> | <p>1943 April 7, Bolivia declares war against the Axis Powers.
Sept. 3, Allies invade Italy.
Sept. 8, Italy surrenders to the Allies.
Oct. 13, Italy (Badoglio government) declares war against Germany.</p> |
| | <p>1944 June 6, D-Day—Allies invade the Channel Coast.
Sept. 13, Rumania signs armistice.</p> |
| | <p>1945 Feb. 23, Turkey and Egypt declare war against Axis.
March 27, Argentina declares war on Germany.
May 2, German army in Italy surrenders to Allies.
May 8, Germany surrenders unconditionally to the Allies.
Aug. 8, Russia declares war on Japan.
Sept. 2, Japan signs surrender.</p> |

COST OF WARS TO U. S. TAXPAYERS

Source: Treasury Department.

War	Date	Direct cost	Pensions	Interest	Total
Revolutionary War.....	1775 to 1783	\$74,555,642 ¹	\$70,000,000 ²	.....	\$144,555,642 ³
War of 1812.....	1812 to 1815	133,700,000 ³	46,218,390 ⁴	.....	179,918,390 ⁵
War with Mexico.....	1846 to 1847	166,000,000 ³	61,653,106 ⁴	.....	227,653,106 ⁵
Civil War.....	1861 to 1865				
U. S. Government.....		4,474,954,364 ⁶	8,126,561,152	\$3,054,000,000 ⁸	15,655,515,516
Confederacy.....		2,099,768,707 ⁶	?	.....	2,099,768,707 ⁶
Spanish-American War.....	1898.....	576,256,000	2,276,470,624 ⁴	49,815,000 ⁸	2,902,541,624
World War I.....	1917 to 1918	25,807,000,000 ⁹	6,391,000,000 ¹⁰	9,557,000,000 ¹¹	41,755,000,000
World War II.....	1941 to 1945	330,500,000,000 ¹²	4,128,608,870 ¹³	15,150,000,000 ¹³	349,778,608,870 ¹⁴
Total.....		363,832,234,713	21,100,512,142	27,810,815,000	412,743,561,855

¹ Foreign loans, \$10,098,706; national and state war debts, \$64,456,936.

² Estimated.

³ Incomplete figures; actual cost almost certainly much higher.

⁴ As of Feb. 28, 1946.

⁵ Including \$468,954,364 expended by the several states.

⁶ Confederate Treasury figures for the period from February 1861 to October 1, 1864, only, expressed in Confederate currency, which depreciated by October 1, 1864, to a ratio with gold of 26 to 1. Does not include expenditures by the several states of the Confederacy.

⁷ No estimate available of pensions paid to Confederate veterans by Southern states.

⁸ As of 1925.

⁹ Including \$88,000,000 of payments under the War Claims Act.

¹⁰ Total cost of Veterans Administration to June 30, 1934.

¹¹ To June 30, 1934.

¹² War expenditures from July 1, 1940, to June 30, 1945, \$281,500,000,000; estimated expenditures for fiscal year ending June 30, 1946, \$49,000,000,000.

¹³ Includes estimated expenditures for fiscal year ending June 30, 1946.

¹⁴ The total cost of World War II to all participants was estimated as of March 10, 1946, at \$1,352,000,000,000 (1 trillion 352 billion dollars). Source: Bank of International Settlements, as reported in the N. Y. *Herald Tribune*.

Important Conferences of World War II

1941—Atlantic Charter Conference (Aug. 9-10): Roosevelt, Churchill meet at sea; issue (Aug. 14) 8-point declaration of common principles.

1942—First U. N. Conference (Jan. 1): 26 nations promise to prosecute war fully and not conclude separate peace.

1943—Casablanca (Fr. Mor.) Conference (Jan. 14-26): Roosevelt, Churchill, De Gaulle, Giraud plan initiative in war; will accept only unconditional surrender. Washington (D. C.) Conference (May 11-27): Roosevelt, Churchill plan global warfare, invasion of France, Burmese campaign.

Quebec Conference (Aug. 10-24): Roosevelt, Churchill, King, Hull, Eden plan Asiatic campaign.

Moscow Conference (Oct. 19-Nov. 1): Hull, Eden, Molotov recognize need for postwar international organization; promise to try war criminals; recognize China as one of Big Four; plan future of Austria, Italy.

Cairo Conference (Nov. 22-26): Roosevelt, Churchill, Chiang Kai-shek plan Japanese offensive; promise free Korea.

Teheran Conference (Nov. 28-Dec. 1): Roosevelt, Churchill, Stalin plan attack on Axis-held Europe.

1944—Dumbarton Oaks Conference (Aug. 21-Oct. 7): Representatives of U.S.S.R., Britain, China, U. S. meet on estate near Washington, D. C., to plan postwar United Nations organization.

Quebec Conference (Sept. 11-16): Roosevelt, Churchill plan Pacific war; advance invasion date of Philippines to Oct. 20, 1944.

1945—Yalta (Crimea) Conference (Feb. 4-11): Roosevelt, Churchill, Stalin plan occupation of Germany and new Polish frontiers; set date for United Nations meeting at San Francisco.

United Nations Conference (Apr. 25-June 26): Representatives of 46 (later 50) nations draw up and sign U. N. Charter in San Francisco.

Potsdam (or Berlin) Conference (July 17-Aug. 2): Truman, Churchill (replaced by A. T. Lee July 28), Stalin established council of foreign ministers to prepare peace treaties; plan postwar German government and reparations to be exacted.

THE DECLARATION OF INDEPENDENCE

IN CONGRESS, JULY 4, 1776

The unanimous DECLARATION of the thirteen united STATES OF
AMERICA.

WHEN, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume, among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident that all men are created equal, that they are endowed, by their Creator, with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and institute new government, laying its foundation on such principles, and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established, should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security. Such has been the patient sufferance of these Colonies, and such is now the necessity which constrains them to alter their former systems of government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these States. To prove this, let facts be submitted to a candid world.

He has refused his assent to laws, the most wholesome and necessary for the public good.

He has forbidden his governors to pass laws of immediate and pressing importance, unless suspended in their operation till his assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of representation in the legislature, a right inestimable to them, and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved representative houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected, whereby the legislative powers, incapable of annihilation, have returned

NOTE: On April 12, 1776, the legislature of North Carolina authorized its delegates to the Continental Congress to join with others in a declaration of separation from Great Britain; the first colony to instruct its delegates to take the actual initiative was Virginia on May 15. On June 7, 1776, Richard Henry Lee of Virginia offered a resolution to the Congress to the effect "that these United Colonies are, and of right, ought to be, free and independent States. . . ." A committee, consisting of Thomas Jefferson, John Adams, Benjamin Franklin, Robert R. Livingston and Roger

Sherman was organized to "prepare a declaration to the effect of the said first resolution." The Declaration of Independence was adopted on July 4, 1776.

Most delegates signed the Declaration August 2, but George Wythe (Va.) signed August 27; Richard Henry Lee (Va.), Elbridge Gerry (Mass.) and Oliver Wolcott (Conn.) in September; Matthew Thornton (N. H.), not a delegate until September, in November; and Thomas McKean (Del.), although present on July 4, not until 1781 by special permission, having served in the army in the interim.

to the people at large for their exercise; the State remaining, in the meantime, exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new appropriations of lands.

He has obstructed the administration of justice by refusing his assent to laws for establishing judiciary powers.

He has made judges dependent on his will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of new offices, and sent hither swarms of officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, standing armies, without the consent of our legislatures.

He has affected to render the military independent of and superior to the civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws; giving his assent to their acts of pretended legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock trial, from punishment for any murders which they should commit on the inhabitants of these States:

For cutting off our trade with all parts of the world:

For imposing taxes on us without our consent:

For depriving us, in many cases, of the benefits of trial by jury:

For transporting us beyond seas to be tried for pretended offenses:

For abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries, so as to render it at once an example and fit instrument for introducing the same absolute rule into these colonies:

For taking away our charters, abolishing our most valuable laws, and altering fundamentally the forms of our governments:

For suspending our own legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated government here, by declaring us out of his protection, and waging war against us.

He has plundered our seas, ravaged our coasts, burnt our towns, and destroyed the lives of our people.

He is, at this time, transporting large armies of foreign mercenaries to complete the works of death, desolation, and tyranny, already begun, with circumstances of cruelty and perfidy, scarcely paralleled in the most barbarous ages, and totally unworthy the head of a civilized nation.

He has constrained our fellow citizens, taken captive on the high seas, to bear arms against their country, to become the executioners of their friends and brethren, or to fall themselves by their hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes, and conditions.

In every stage of these oppressions we have petitioned for redress in the most humble terms: our repeated petitions have been answered only by repeated injury. A prince whose character is thus marked by every act which may define a tyrant, is unfit to be the ruler of a free people.

Nor have we been wanting in attentions to our British brethren. We have warned them, from time to time, of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity which denounces our separation, and hold them, as we hold the rest of mankind, enemies in war, in peace friends.

WE, therefore, the Representatives of the United States of America, in General Congress assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do in the name, and by authority of the good people of these Colonies, solemnly publish and declare, That these United Colonies, are, and of right ought to be, *free and independent States*; that they are absolved from all allegiance to the British crown, and that all political connexion between them and the State of Great Britain, is, and ought to be, totally dissolved; and that as *free and independent States*, they have full power to levy war, conclude peace, contract alliances, establish commerce, and to do all other acts and things which *independent States* may of right do. And for the support of this declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honour.

JOHN HANCOCK.

New Hampshire.

Josiah Bartlett,
Wm. Whipple,
Matthew Thornton.

Rhode Island.

Step. Hopkins,
William Ellery.

Connecticut.

Roger Sherman,
Sam'l Huntington,
Wm. Williams,
Oliver Wolcott.

New York.

Wm. Floyd,
Phil. Livingston,
Frans. Lewis,
Lewis Morris.

New Jersey.

Richd. Stockton,
Jno. Witherspoon,
Fras. Hopkinson,
John Hart,
Abra. Clark.

Pennsylvania.

Robt. Morris,
Benjamin Rush,
Benja. Franklin,
John Morton,
Geo. Clymer,
Jas. Smith,
Geo. Taylor,
James Wilson,
Geo. Ross.

Massachusetts-Bay.

Saml. Adams,
John Adams,
Robt. Treat Paine,
Elbridge Gerry.

Delaware.

Caesar Rodney,
Geo. Read,
Tho. M'Kean.

Maryland.

Samuel Chase,
Wm. Paca,
Thos. Stone,
Charles Carroll of Carrollton.

Virginia.

George Wythe,
Richard Henry Lee,
Th. Jefferson,
Benja. Harrison,
Ths. Nelson, Jr.,
Francis Lightfoot Lee,
Carter Braxton.

North Carolina.

Wm. Hooper,
Joseph Hewes,
John Penn.

South Carolina.

Edward Rutledge,
Thos. Heyward, Junr.,
Thomas Lynch, Junr.,
Arthur Middleton.

Georgia.

Button Gwinnett,
Lyman Hall,
Geo. Walton.

IN CONGRESS

JANUARY, 18, 1777. }

Ordered:

That an authenticated copy of the Declaration of Independency, with the names of the Members of Congress subscribing the same, be sent to each of the United States, and that they be desired to have the same put on record.

By order of Congress.

Attest, CHAS. THOMSON, *Secy.* A true copy. JOHN HANCOCK, *Presidt.*

The Statue of Liberty

The Statue of Liberty ("Liberty Enlightening the World") is a 225-ton bronze female figure, 152 ft. 5 in. in height, facing the ocean from Bedloe's Island in New York Harbor. The right hand holds aloft a torch, and the left hand carries a tablet upon which is inscribed: "July 4, 1776."

The statue was designed by Frédéric Auguste Bartholdi, at the request of the French government, as a present to the U. S. to commemorate the centennial of American independence. It cost \$450,000.

The pedestal, 151 ft. 1 in. in height, was erected by the U. S., and its cost of \$350,000 was met by popular subscription in this country. The cornerstone was laid Aug.

5, 1884, and the unveiling of the statue took place Oct. 28, 1886.

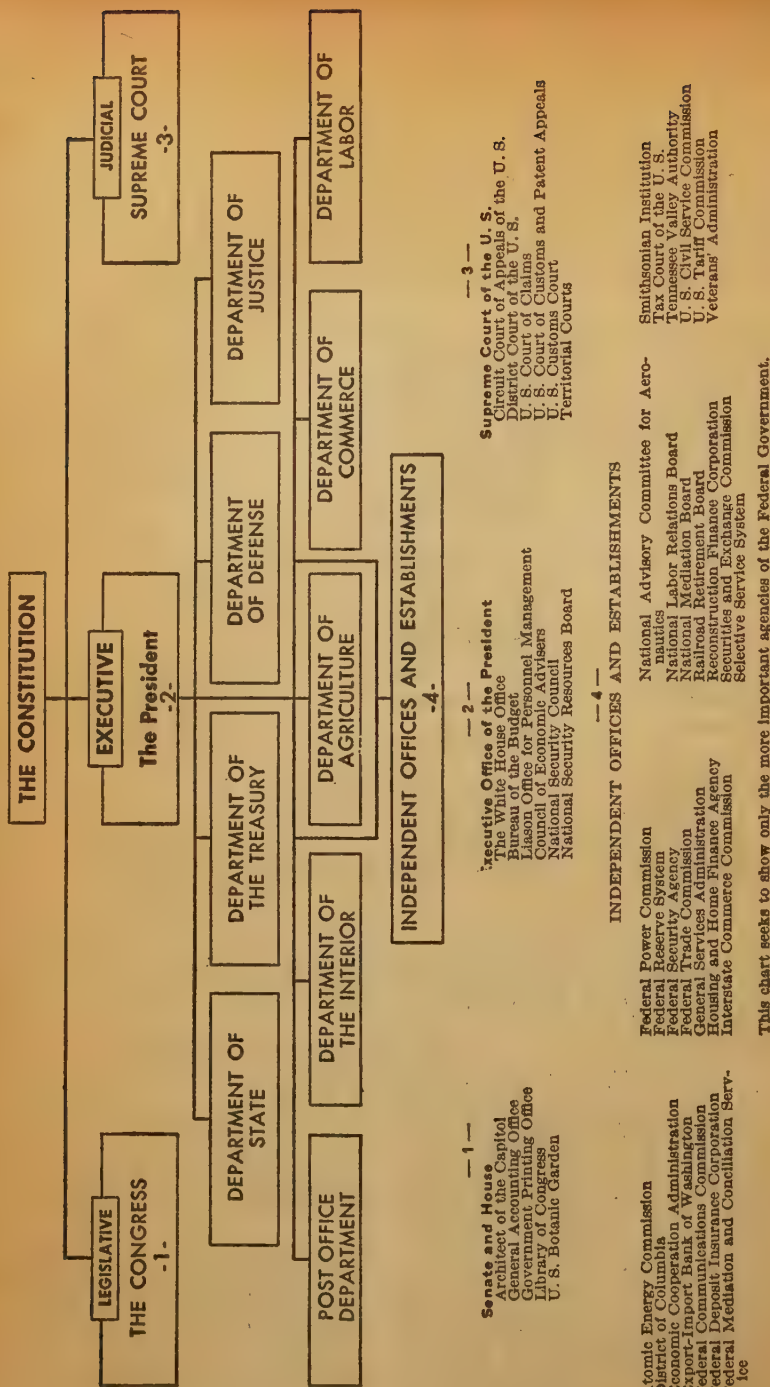
On a tablet inside the main entrance of the pedestal is engraved the following sonnet, written by Emma Lazarus:

The New Colossus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon hand
Glowed world-wide welcome; her mild eyes com-

mand
The air-brided harbor that twin cities frame.
"Keep, ancient lands, your storied pomp!" cries she
With silent lips. "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door."

THE GOVERNMENT OF THE UNITED STATES



CONSTITUTION of the UNITED STATES OF AMERICA

THE oldest federal constitution in existence was framed by a convention of delegates from twelve of the thirteen original states in Philadelphia in May 1787, Rhode Island failing to send a delegate. George Washington presided over the session, which lasted until September 17, 1787. The draft (originally a preamble and seven Articles) was submitted to all thirteen states and was to become effective when ratified by nine states. It went into effect on the first Wednesday in March 1789, having been ratified by New Hampshire, the ninth state to approve, on June 21, 1788. The states ratified the Constitution in the following order:

Delaware	December 7, 1787	South Carolina	May 23, 1788
Pennsylvania	December 12, 1787	New Hampshire	June 21, 1788
New Jersey	December 18, 1787	Virginia	June 25, 1788
Georgia	January 2, 1788	New York	July 26, 1788
Connecticut	January 9, 1788	North Carolina	November 21, 1789
Massachusetts	February 6, 1788	Rhode Island	May 29, 1790
Maryland	April 28, 1788		

Outline of the Constitution

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SEC. 1. Legislative powers; in whom vested.

SEC. 2. House of Representatives, how and by whom chosen—Qualifications of a Representative—Representatives and direct taxes, how apportioned—Enumeration—Vacancies to be filled—Power of choosing officers, and of impeachment.

SEC. 3. Senators, how and by whom chosen—How classified—State Executive, when to make temporary appointments, in case, etc.—Qualifications of a Senator—President of the Senate, his right to vote—President pro tem., and other officers of the Senate, how chosen—Power to try impeachments—When President is tried, Chief Justice to preside—Sentence.

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SEC. 5. Membership—Quorum—Adjournments—Rules—Power to punish or expel—Journal—Time of adjournments, how limited, etc.

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SEC. 8. Powers of Congress.

SEC. 9. Provision as to migration or importation of certain persons—Habeas Corpus—Bills of attainder, etc.—Taxes, how apportioned—No export duty—No commercial preference—Money, how drawn from treasury, etc.—No titular nobility—Officers not to receive presents, etc.

SEC. 10. States prohibited from the exercise of certain powers.

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SEC. 1. President; his term of office—Electors of President; number and how appointed—Electors to vote on same day—Qualification of President—On whom his duties devolve in case of his removal, death, etc.—President's compensation—His oath of office.

SEC. 2. President to be commander in chief—He may require opinions of Cabinet Officers, etc., may pardon—Treaty-making power—Nomination of certain officers—When President may fill vacancies.

SEC. 3. President shall communicate to Congress—He may convene and adjourn Congress, in case of disagreement, etc.—Shall receive ambassadors, execute laws, and commission officers.

SEC. 4. All civil offices forfeited for certain crimes.

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XVIII. Prohibition.

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XXI. Repeal of Prohibition.

The Constitution of the United States of America

PREAMBLE.—WE THE PEOPLE of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

ARTICLE I

Section 1

Legislative powers vested in Congress.—All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Section 2

Composition of the House of Representatives.—1. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

Qualifications of Representatives.—2. No Person shall be a Representative who shall not have attained to the Age of twenty-five Years, and been seven Years a Citizen

of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Apportionment of Representatives and direct taxes—census.*—3. [Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other persons.] The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

Filling of vacancies in representation.—

4. When vacancies happen in the Representation from any State, the Executive

* The clause included in brackets is amended by the fourteenth amendment, second section.

Authority thereof shall issue Writs of Election to fill such Vacancies.

Selection of officers; power of impeachment.—5. The House of Representatives shall chuse their Speaker and other Officers; and shall have the sole Power of Impeachment.

Section 3*

The Senate.—[1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.]

Classification of Senators; filling of vacancies.—2. Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one-third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments [until the next Meeting of the Legislature, which shall then fill such Vacancies].

Qualification of Senators.—3. No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

Vice President to be President of Senate.—4. The Vice President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

Selection of Senate officers; President pro tempore.—5. The Senate shall chuse their other Officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the Office of President of the United States.

Senate to try impeachments.—6. The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in cases of impeachment.—7. Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and en-

joy any Office of honor, Trust, or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

Section 4

Control of congressional elections.—1. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of chusing Senators.

Time for assembling of Congress.—2. The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

Section 5

Each house to be the judge of the election and qualifications of its members; regulations as to quorum.—1. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each house to determine its own rules.—2. Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behavior, and, with the Concurrence of two thirds, expel a Member.

Journals and yeas and nays.—3. Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

Adjournment.—4. Neither House, during the Session of Congress shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

Section 6

Compensation and privileges of Members of Congress.—1. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the

* The first paragraph of section three of article I of the Constitution of the United States, and so much of paragraph two of the same section as relates to filling vacancies, are amended by the seventeenth amendment to the Constitution.
† Amended by article XX, section 2, of the amendments to the Constitution.

Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

Incompatible offices; exclusions.—2. No Senator or Representative shall, during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

Section 7

Revenue bills to originate in House.—1. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Manner of passing bills; veto power of President.—2. Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; If he approve he shall sign it, but if not he shall return it, with his Objections to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the Same shall be a Law, in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

Concurrent orders or resolutions, to be passed by President.—3. Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

Section 8

General powers of Congress.*

The Congress shall have Power.—1. To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States.

Borrowing of money.—2. To borrow money on the credit of the United States.

Regulation of commerce.—3. To regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes.

Naturalization and bankruptcy.—4. To establish a uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States.

Money, weights and measures.—5. To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures.

Counterfeiting.—6. To provide for the Punishment of counterfeiting the Securities and current Coin of the United States.

Post offices.—7. To establish Post Offices and post Roads.

Patents and copyrights.—8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

Inferior courts.—9. To constitute Tribunals inferior to the supreme Court.

Piracies and felonies.—10. To define and punish Piracies and Felonies committed on the high Seas, and Offenses against the Law of Nations.

War; marque and reprisal.—11. To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water.

Armies.—12. To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years.

Navy.—13. To provide and maintain a Navy.

Land and naval forces.—14. To make Rules for the Government and Regulation of the land and naval Forces.

Calling out militia.—15. To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions.

Organizing, arming and disciplining militia.—16. To provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be

* By article XVI of the amendments to the Constitution, Congress is given the power to lay and collect taxes on income.

employed in the Service of the United States, reserving to the States, respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress.

Exclusive legislation over District of Columbia.—17. To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—and

To enact laws necessary to enforce Constitution.—18. To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

Section 9

Migration or importation of certain persons shall not be prohibited before 1808.—1. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but a tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

Writ of habeas corpus not to be suspended; exception.—2. The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

Bills of attainder and ex post facto laws prohibited.—3. No Bill of Attainder or ex post facto Law shall be passed.

Capitation and other direct taxes.—4. No capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.*

Exports not to be taxed.—5. No Tax or Duty shall be laid on Articles exported from any State.

No preference to be given to ports of any State; interstate shipping.—6. No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

Money, how drawn from treasury; financial statements to be published.—7. No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

Titles of nobility not to be granted; acceptance by government officers of favors from foreign powers.—8. No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

Section 10

Limitations of the powers of the several States.—1. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts or grant any Title of Nobility.

State imposts and duties.—2. No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its Inspection Laws; and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

Further restrictions on powers of States.—3. No State shall, without the consent of Congress, lay any duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

ARTICLE II

Section 1

The President; the executive power.—1. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice-President, chosen for the same Term, be elected, as follows:

Appointment and qualifications of presidential electors.—2. Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors,

* See sixteenth amendment.

equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

Original method of electing the President and Vice-President.*—[The Electors shall meet in their respective States, and vote by Ballot for two persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately chuse by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the list the said House shall in like Manner chuse the President. But in chusing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two-thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice-President. But if there should remain two or more who have equal Votes, the Senate should chuse from them by Ballot the Vice-President.]

Congress may determine time of choosing electors and day for casting their votes.—3. The Congress may determine the Time of chusing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

Qualifications for the office of President.†—4. No person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty-five Years, and been fourteen Years a Resident within the United States.

Filling vacancy in the office of President.‡—5. In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice-President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice-President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

Compensation of the President.—6. The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be encreased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Oath to be taken by the President.—7. Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Section 2

The President to be commander-in-chief of army and navy and head of executive departments; may grant reprieves and pardons.—1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment.

President may, with concurrence of Senate, make treaties, appoint ambassadors, etc.; appointment of inferior officers, authority of Congress over.—2. He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law; but the Congress may by Law vest the Appoint-

* This clause has been superseded by the twelfth amendment.

† For qualifications of the Vice President, see article XII of the amendments.

‡ Amended by article XX, sections 3, and 4, of the amendments to the Constitution.

ment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

President may fill vacancies in office during recess of Senate.—3. The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

Section 3

President to give advice to Congress; may convene or adjourn it on certain occasions; to receive ambassadors, etc.; have laws executed and commission all officers.—He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

Section 4

All civil officers removable by Impeachment.—1. The President, Vice-President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III

Section 1

Judicial powers; how vested; term of office and compensation of judges.—The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behavior, and shall, at stated Times, receive for their Services a Compensation which shall not be diminished during their Continuance in Office.

Section 2

Jurisdiction of Federal courts.*—1. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of Admiralty and maritime Jurisdiction;—to Controversies to which the United States shall

be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

Original and appellate Jurisdiction of Supreme Court.—2. In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

Trial of all crimes, except impeachment, to be by jury.—3. The trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the trial shall be at such Place or Places as the Congress may by Law have directed.

Section 3

Treason defined; conviction of.—1. Treason against the United States, shall consist only in levying War against them, or, in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

Congress to declare punishment for treason; proviso.—2. The Congress shall have power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

ARTICLE IV

Section 1

Each State to give full faith and credit to the public acts and records of other States.—Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

Section 2

Privileges of citizens.—1. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

Extradition between the several States.—2. A Person charged in any State with Treason, Felony, or other Crime, who shall

* This section is abridged by article XI of the amendments.

flee from Justice, and be found in another State, shall on demand of the executive Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

Persons held to labor or service in one State, fleeing to another, to be returned.* —3. No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

Section 3

New States.—1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

Regulations concerning territory.—2. The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

Section 4

Republican form of government and protection guaranteed the several States.—The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE V

Ways in which the Constitution can be amended.—The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two-thirds of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall be valid to all Intents and Purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by Conventions in three-fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year One thousand eight hundred and eight shall in any Manner affect the first and

fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE VI

Debts contracted under the confederation secured.—1. All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

Constitution, laws and treaties of the United States to be supreme.—2. This Constitution, and the Laws of the United States shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Who shall take constitutional oath; no religious test as to official qualification.—3. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE VII

Constitution to be considered adopted when ratified by nine States.—The Ratification of the Conventions of nine States shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth. In Witness whereof We have hereunto subscribed our Names.

GO. WASHINGTON

President and Deputy from Virginia

NEW HAMPSHIRE

John Langdon Nicholas Gilman

MASSACHUSETTS

Nathaniel Gorham Rufus King

CONNECTICUT

Wm Saml Johnson Roger Sherman

NEW YORK

Alexander Hamilton

NEW JERSEY

Will: Livingston Wm. Paterson
David Brearley Jona: Dayton

* See thirteenth amendment

PENNSYLVANIA

B. Franklin
Robt. Morris
Thos. Fitzsimons
James Wilson

Thomas Mifflin
Geo. Clymer
Jared Ingersoll
Gouv Morris

DELAWARE

Geo. Read
John Dickinson
Jaco: Broom

Gunning Bedford Jun
Richard Bassett

MARYLAND

James McHenry
Dani Carroll

Dan: of St Thos Jenifer

VIRGINIA

John Blair —

James Madison Jr.

NORTH CAROLINA

Wm Blount
Hu Williamson

Richd Dobbs Spaight,

SOUTH CAROLINA

J. Rutledge
Charles Pinckney

Charles Cotesworth Pinckney.
Pierce Butler

GEORGIA

William Few
Attest: William Jackson, Secretary.

Abr Baldwin

AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES

[The following amendments from Articles I to X inclusive were proposed at the first session of the first Congress which convened in New York City on March 4, 1789, and were adopted as follows: New Jersey, Nov. 20, 1789; Maryland, Dec. 19, 1789; North Carolina, Dec. 22, 1789; South Carolina, Jan. 19, 1790; New Hampshire, Jan. 25, 1790; Delaware, Jan. 28, 1790; Pennsylvania, March 10, 1790; New York, March 27, 1790; Rhode Island, June 15, 1790; Vermont, Nov. 3, 1791; and Virginia, Dec. 15, 1791.]

ARTICLE I

Freedom of religion, speech, of the press, and right of petition.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II

Right of people to bear arms not to be infringed.—A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

ARTICLE III

Quartering of troops.—No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV

Persons and houses to be secure from unreasonable searches and seizures.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V

Trials for crimes; just compensation for private property taken for public use.—No person shall be held to answer for a capi-

tal, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI

Civil rights in trials for crimes enumerated.—In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

ARTICLE VII

Civil rights in civil suits.—In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

ARTICLE VIII

Excessive bail, fines and punishments prohibited.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX

Reserved rights of people.—The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X

Powers not delegated, reserved to states and people respectively.—The powers not

delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

[The Eleventh Amendment was proposed to the several states by the Third Congress on March 5, 1794, and declared effective January 8, 1798.]

ARTICLE XI

Judicial power of United States not to extend to suits against a State.—The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

[The Twelfth Amendment was submitted to the legislatures of the states by the Eighth Congress on December 12, 1803, and became part of the Constitution September 25, 1804.]

ARTICLE XII

Present mode of electing President and Vice-President by electors.*—The Electors shall meet in their respective states and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate;—The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted;—The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by states, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of

March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

[The Thirteenth Amendment was offered to the several states by the Thirty-eighth Congress on February 1, 1865, and declared in force December 18, 1865.]

ARTICLE XIII

Section 1

Slavery prohibited.—Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Section 2

Congress given power to enforce this article.—Congress shall have power to enforce this article by appropriate legislation.

[The Fourteenth Amendment was proposed to the legislature by the Thirty-ninth Congress on June 16, 1866 and was approved July 28, 1868.]

ARTICLE XIV

Section 1

Citizenship defined; privileges of citizens.—All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2

Apportionment of Representatives.—Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding

* Amended by article XX, sections 3 and 4, of the amendments to the Constitution.

Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Section 3

Disqualification for office; removal of disability.—No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4

Public debt not to be questioned; payment of debts and claims incurred in aid of rebellion forbidden.—The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Section 5

Congress given power to enforce this article.—The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

[The Fifteenth Amendment was submitted to the State Legislatures by the Fortieth Congress on February 27, 1869, and declared in force March 30, 1870.]

ARTICLE XV

Section 1

Right of certain citizens to vote established.—The right of citizens of the United

States to vote shall not be denied or abridged by the United States or by any State, on account of race, color, or previous condition of servitude.

Section 2

Congress given power to enforce this article.—The Congress shall have power to enforce this article by appropriate legislation.

[The Sixteenth Amendment was proposed to the States by the Sixty-first Congress on July 12, 1909, and became effective February 25, 1913.]

ARTICLE XVI

Taxes on income; Congress given power to lay and collect.—The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

[The Sixty-second Congress proposed the Seventeenth Amendment on May 16, 1912, and it became a part of the Constitution on May 31, 1913.]

ARTICLE XVII

Election of United States Senators; filling of vacancies; qualifications of electors.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: Provided, that the legislature of any State may empower the executive thereof to make temporary appointment until the people fill the vacancies by election as the legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

[The Eighteenth or Dry Law Amendment was submitted to the legislatures of the several states by the Sixty-fifth Congress and on January 29, 1919, it was announced the amendment would be in full force on January 16, 1920.]

ARTICLE XVIII*

Manufacture, sale or transportation of intoxicating liquors, for beverage purposes, prohibited.—1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof

* Repealed by article XXI, effective December 5, 1933.

into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Congress and the several States given concurrent power to pass appropriate legislation to enforce this article.—2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Provisions of article to become operative, when adopted by three-fourths of the States.—3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

[The Nineteenth or Equal Suffrage Amendment was proposed to the states by the Sixty-sixth Congress on June 4, 1919, and ratified on August 26, 1920.]

ARTICLE XIX

The right of citizens to vote shall not be denied because of sex.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

[The Twentieth or "Lame Duck" Amendment was proposed to the legislatures by the Seventy-second Congress on March 3, 1932, and was proclaimed in effect Feb. 6, 1933, 39 states having by then ratified it. Sections 1 and 2 became effective October 15, 1933.]

ARTICLE XX

Section 1

Terms of President, Vice-President, Senators and Representatives.—The terms of the President and Vice-President shall end at noon on the 20th day of January, and the terms of Senators and Representatives at noon on the 3d day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

Section 2

Time of assembling Congress.—The Congress shall assemble at least once in every year, and such meeting shall begin at noon on the 3d day of January, unless they shall by law appoint a different day.

Section 3

Filling vacancy in office of President.—1. At the time fixed for the beginning of the term of the President, the President elect shall have died, the Vice-President elect shall become President. If a President shall not have been chosen before

the time fixed for the beginning of his term, or if the President elect shall have failed to qualify, then the Vice-President elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President elect nor a Vice-President elect shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice-President shall have qualified.

Section 4

Power of Congress in Presidential succession.—The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice-President whenever the right of choice shall have devolved upon them.

Section 5

Time of taking effect.—Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

Section 6

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission.

[The Twenty-first Amendment, repealing prohibition, was proposed by the second session of the Seventy-second Congress on February 20, 1933, and became effective with ratification by Utah, the thirty-sixth state to ratify, on December 5, 1933.]

ARTICLE XXI

Section 1

Repeal of Prohibition Amendment.—The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

Section 2

Transportation of intoxicating liquors.—The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

Section 3

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by conventions in the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

Lincoln's Gettysburg Address

The Battle of Gettysburg, one of the most noted battles of the Civil War, was fought on July 1, 2, and 3, 1863. On November 19, 1863, the field was dedicated as a national cemetery by President Lincoln in a two-minute speech that was to become immortal. At the time of its de-

livery the speech was relegated to the inside pages of the papers, while a two-hour address by Edward Everett, the leading orator of the time, caught the headlines.

The following is the text of the address revised by President Lincoln from his own notes:

FOURSCORE and seven years ago our fathers brought forth on this continent a new nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But, in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from the earth.

The Monroe Doctrine

The Monroe Doctrine was announced in President James Monroe's message to Congress, during his second term on December 2, 1823 in part as follows:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

Minority Presidents

Thirteen candidates have become President of the U. S. with a popular vote less than 50 per cent of the total vote cast. It should be noted, however, that in elections before 1872, presidential electors were not chosen by popular vote in all states. Adams' election in 1824 was by the House of Representatives, which chose him over Jackson, who had a plurality of both electoral and popular votes, but not a majority in the electoral college.

Besides Jackson in 1824, only two other candidates receiving the largest popular vote have failed to gain a majority in the electoral college—Samuel J. Tilden (D) in 1876 and Grover Cleveland (D) in 1888.

The "minority" Presidents follow:

Year	President	Electoral	Popular vote
		Pct.	Pct.
1824	John Q. Adams.....	31.8	29.8
1844	James K. Polk (D).....	61.8	49.3
1848	Zachary Taylor (W).....	56.2	47.3
1856	James A. Buchanan (D).....	58.7	45.3
1860	Abraham Lincoln (R).....	59.4	39.9
1876	Rutherford B. Hayes (R).....	50.1	47.9
1880	James A. Garfield (R).....	57.9	48.3
1884	Grover Cleveland (D).....	54.6	48.8
1888	Benjamin Harrison (R).....	58.1	47.8
1892	Grover Cleveland (D).....	62.4	46.0
1912	Woodrow Wilson (D).....	81.9	41.8
1916	Woodrow Wilson (D).....	52.1	49.3
1948	Harry S. Truman (D).....	57.1	49.5

The Mayflower Compact

On September 6, 1620, the *Mayflower*, a sailing vessel of about 180 tons, started her memorable voyage from Plymouth, England with 100 or 102* pilgrims aboard, bound for Virginia to establish a private permanent colony in North America. Arriving at Provincetown, Mass., on November 11 (November 21, new style calendar),

forty-one of the passengers signed the famous "Mayflower Compact" as the boat lay at anchor in that Cape Cod harbor. A small detail of the pilgrims, led by William Bradford, assigned to select a place for permanent settlement landed at what is now Plymouth, Mass., on December 21, N.S.

The text of the compact follows:

IN THE NAME OF GOD, Amen. We, whose names are underwritten, the Loyal Subjects of our dread Sovereign Lord, King James, by the Grace of God, of Great Britain, France and Ireland, King, Defender of the Faith, &

Having undertaken for the Glory of God, and Advancement of the Christian Faith, and the Honour of our King and Country, a voyage to plant the first colony in the northern Parts of Virginia; do by these Presents, solemnly and mutually in the Presence of God and one of another, covenant and combine ourselves together into a civil Body Politick, for our better Ordering and Preservation, and Furtherance of the Ends aforesaid; And by Virtue hereof to enact, constitute, and frame, such just and equal Laws, Ordinances, Acts, Constitutions and Offices, from time to time, as shall be thought most meet and convenient for the General good of the Colony; unto which we promise all due Submission and Obedience.

In WITNESS whereof we have hereunto subscribed our names at Cape Cod the eleventh of November, in the Reign of our Sovereign Lord, King James of England, France and Ireland, the eighteenth, and of Scotland the fifty-fourth. Anno Domini, 1620

John Carver
Digery Priest
William Brewster
Edmund Margesson
John Alden
George Soule
James Chilton
Francis Cooke
Josias Fletcher
John Ridgate
Christopher Martin

William Mullins
Thomas English
John Howland
Stephen Hopkins
Edward Winslow
Gilbert Winslow
Miles Standish
Richard Bitteridge
Francis Eaton
John Tilly
John Billington

Thomas Tinker
Samuel Fuller
Richard Clark
John Allerton
Richard Warren
Edward Liester
William Bradford
Thomas Williams
Isaac Allerton
Peter Brown
John Turner

Edward Tilly
John Craxton
Thomas Rogers
John Goodman
Edward Fuller
Richard Gardiner
William White
Edward Doten

* Historians differ as to whether 100, 101, or 102 passengers were aboard.

The Early Congresses

At the urging of Massachusetts and Virginia, the First Continental Congress met in Philadelphia on September 5, 1774, and was attended by representatives of all the colonies except Georgia. Patrick Henry of Virginia declared: "The distinctions between Pennsylvanians, New Yorkers and New Englanders are no more. I am not a Virginian but an American." This Congress, which adjourned October 26, 1774, passed intercolonial resolutions calling for extensive boycott by the colonies against British trade.

The following year, most of the delegates from the colonies were chosen by popular election to attend the Second Continental Congress, which assembled in Philadelphia on May 10. As war had already begun between the colonies and England, the chief problems before the Congress were the procuring of military supplies, the establishment of an army and proper defenses, the issuing of continental bills of credit, etc. On June 15, 1775, George Washington

was elected to command the Continental army. Congress adjourned Dec. 12, 1776.

Other Continental Congresses were held in Baltimore (1776-77), Philadelphia (1777), Lancaster, Pa. (1777), York, Pa. (1777-78) and Philadelphia (1778-81).

In 1781, the Articles of Confederation, although establishing a league of the thirteen states rather than a strong central government, provided for the continuance of Congress. Known thereafter as the Congress of the Confederation, it held sessions in Philadelphia (1781-83), Princeton, N. J. (1783), Annapolis, Md. (1783-84) and Trenton, N. J. (1784). Five sessions were held in New York City between the years 1785 and 1789.

The Congress of the United States, established by the ratification of the Constitution, held its first meeting on Mar. 4, 1789, in N. Y. C. Several sessions of Congress were held in Philadelphia, and the first meeting in Washington D. C., was on Nov. 17, 1800.

Presidents of the Continental Congresses

Name	Elected	Born	Died
Peyton Randolph, Va.	Sept. 5, 1774	c.1721	1775
Henry Middleton, S. C.	Oct. 22, 1774	1717	1784
Peyton Randolph, Va.	May 10, 1775	c.1721	1775
John Hancock, Mass.	May 24, 1775	1737	1793
Henry Laurens, S. C.	Nov. 1, 1777	1724	1792
John Jay, N. Y.	Dec. 10, 1778	1745	1829
Samuel Huntington, Conn.	Sept. 28, 1779	1731	1796
Thomas McKean, Del.	July 10, 1781	1734	1817
John Hanson, Md.	Nov. 5, 1781	1715	1783
Elias Boudinot, N. J.	Nov. 4, 1782	1740	1821
Thomas Mifflin, Pa.	Nov. 3, 1783	1744	1800
Richard Henry Lee, Va.	Nov. 30, 1784	1732	1794
John Hancock, Mass.*	Nov. 23, 1785	1737	1793
Nathaniel Gorham, Mass.	June 6, 1786	1738	1796
Arthur St. Clair, Pa.	Feb. 2, 1787	1734	1818
Cyrus Griffin, Va.	Jan. 22, 1788	1748	1810

* Resigned May 29, 1786, never having served, because of continued illness.

The Star-Spangled Banner

Francis Scott Key, 1814

O say, can you see, by the dawn's early light,
What so proudly we hail'd at the twilight's last gleaming?
Whose broad stripes and bright stars, thro' the perilous fight,
O'er the ramparts we watch'd, were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air,
Gave proof thro' the night that our flag was still there.
O say, does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?

On the shore dimly seen thro' the mists of the deep,
Where the foe's haughty host in dread silence reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines on the stream:
'T is the star-spangled banner: O, long may it wave
O'er the land of the free and the home of the brave!

And where is that band who so vauntingly swore
That the havoc of war and the battle's confusion,
A home and a country should leave us no more?
Their blood has wash'd out their foul footsteps' pollution.
No refuge could save the hireling and slave
From the terror of flight or the gloom of the grave:
And the star-spangled banner in triumph doth wave
O'er the land of the free and the home of the brave.

O thus be it ever when free-men shall stand
Between their lov'd home and the war's desolation;
Blest with vict'ry and peace, may the heav'n-rescued land
Praise the Pow'r that hath made and preserv'd us a nation!
Then conquer we must, when our cause it is just,
And this be our motto: "In God is our trust!"
And the star-spangled banner in triumph shall wave
O'er the land of the free and the home of the brave!

ON SEPTEMBER 13, 1814, Francis Scott Key visited the British fleet in Chesapeake Bay to secure the release of Dr. William Beanes, who had been captured after the burning of Washington, D. C. The release was secured, but Key was detained on ship overnight during the shelling of Fort McHenry, one of the forts defending Baltimore. In the morning, he was so delighted to see the American flag still flying over the fort that he began a poem to commemorate the occasion. Entitled "The Star-Spangled Banner," the poem soon attained wide popularity as sung to the tune "Anacreon in Heaven." The origin of this tune is obscure, but it may have been written by John Stafford Smith, a British composer born in 1750. "The Star-Spangled Banner" was officially made the National Anthem by Congress in 1931, although already adopted as such by the Army and Navy.

History of the Flag

Source: *Encyclopaedia Britannica*.

THE FIRST OFFICIAL AMERICAN flag, the Continental or Grand Union flag, was displayed on Prospect Hill, Jan. 1, 1776, in the American lines besieging Boston. It had thirteen alternate red and white stripes, with the British Union Jack in the upper left corner.

On June 14, 1777, the Continental Congress adopted the design for a new flag, which actually was the Continental flag with the red cross of St. George and the white cross of St. Andrew replaced on the blue field by thirteen stars, one for each state. No rule was made as to the arrangement of the stars, and while they were usually shown in a circle, there were various other designs. It is uncertain when the new flag was first flown, but its first official announcement is believed to have been on Sept. 3, 1777.

The first public assertion that Betsy Ross made the first Stars and Stripes appeared in a paper read before the Historical Society of Pennsylvania on March 14, 1870, by William J. Canby, a grandson. However, Mr. Canby on later investigation found no official documents of any action by Congress on the flag before June 14, 1777. Betsy Ross' own story, according to her daughter, was that Washington, Robert Morris and George Ross, as representatives of Congress, visited her in Philadelphia in June, 1776, showing her a rough draft of the flag and asking her if she could make one. However, the only actual record of the manufacture of flags by Betsy Ross is a voucher in Harrisburg, Pa., for 14 pounds

* 11 states formally seceded, and unofficial groups in Kentucky and Missouri adopted ordinances of secession. On this basis, these two states were admitted to the Confederacy, although the official state governments remained in the Union.

and some shillings for flags for the Pennsylvania navy.

On Jan. 13, 1794, Congress voted to add two stars and two stripes to the flag in recognition of the admission of Vermont and Kentucky to the Union. By 1818, there were twenty states in the Union, and as it was obvious that the flag would soon become unwieldy, Congress voted April 18 to return to the original thirteen stripes and to indicate the admission of a new state simply by the addition of a star the following July 4. The last two stars were added July 4, 1912, for New Mexico and Arizona.

The first Confederate flag, adopted in 1861 by the Confederate convention in Montgomery, Ala., was called the Stars and Bars; but because of its similarity in colors to the American flag, there was much confusion in the Battle of Bull Run. To remedy this situation, Gen. G. T. Beauregard suggested a battle flag, which was used by the Southern armies throughout the war. The flag consisted of a red field on which was placed a blue cross of St. Andrew separated from the field by a white fillet and adorned with thirteen* white stars for the Confederate states. In May, 1863, at Richmond, an official flag was adopted by the Confederate Congress. This flag was white and twice as long as wide; the union, two-thirds the width of the flag, contained the battle flag designed for Gen. Beauregard. A broad transverse stripe of red was added Feb. 4, 1865, so that the flag might not be mistaken for a signal of truce.

Flag Etiquette

(Public Law 829—77th Congress)

JOINT RESOLUTION !

To amend Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America."

Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, That Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America," be, and the same is hereby amended to read as follows:

That the following codification of existing rules and customs pertaining to the display and use of the flag of the United States of America be, and it is hereby established for the use of such civilians or civilian groups or organizations as may

not be required to conform with regulations promulgated by one or more executive departments of the Government of the United States.

Sec. 2. (a) It is the universal custom to display the flag only from sunrise to sunset on buildings and on stationary flag-staffs in the open. However, the flag may be displayed at night upon special occasions when it is desired to produce a patriotic effect.

(b) The flag should be hoisted briskly and lowered ceremoniously.

(c) The flag should not be displayed on days when the weather is inclement.

(d) The flag should be displayed on all days when the weather permits, especially on New Year's Day, January 1; Inauguration Day, January 20; Lincoln's Birthday, February 12; Washington's Birthday, Feb-

ruary 22; Army Day, April 6; Easter Sunday (variable); Mother's Day, second Sunday in May; Memorial Day (half-staff until noon), May 30; Flag Day, June 14; Independence Day, July 4; Labor Day, first Monday in September; Constitution Day, September 17; Columbus Day, October 12; Navy Day, October 27; Armistice Day, November 11; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; such other days as may be proclaimed by the President of the United States; the birthdays of States (dates of admission); and on State holidays.

(e) The flag should be displayed daily, weather permitting, on or near the main administration building of every public institution.

(f) The flag should be displayed in or near every polling place on election days.

(g) The flag should be displayed during school days in or near every schoolhouse.

Sec. 3. That the flag, when carried in a procession with another flag or flags, should be either on the marching right; that is, the flag's own right, or, if there is a line of other flags, in front of the center of that line.

(a) The flag should not be displayed on a float in a parade except from a staff, or as provided in subsection (i).

(b) The flag should not be draped over the hood, top, sides, or back of a vehicle or of a railroad train or a boat. When the flag is displayed on a motorcar, the staff shall be fixed firmly to the chassis or clamped to the radiator cap.

(c) No other flag or pennant should be placed above or, if on the same level, to the right of the flag of the United States of America, except during church services conducted by naval chaplains at sea, when the church pennant may be flown above the flag during church services for the personnel of the Navy.

(d) The flag of the United States of America, when it is displayed with another flag against a wall from crossed staffs, should be on the right, the flag's own right, and its staff should be in front of the staff of the other flag.

(e) The flag of the United States of America should be at the center and at the highest point of the group when a number of flags of States or localities or pennants of societies are grouped and displayed from staffs.

(f) When flags of States, cities, or localities, or pennants of societies are flown on the same halyard with the flag of the United States, the latter should always be at the peak. When the flags are flown from adjacent staffs, the flag of the United States should be hoisted first and lowered last. No such flag or pennant may be placed above the flag of the United States or to the right of the flag of the United States.

(g) When flags of two or more nations

are displayed, they are to be flown from separate staffs of the same height. The flags should be of approximately equal size. International usage forbids the display of the flag of one nation above that of another nation in time of peace.

(h) When the flag of the United States is displayed from a staff projecting horizontally or at an angle from the window sill, balcony, or front of a building, the union of the flag should be placed at the peak of the staff unless the flag is at half-staff. When the flag is suspended over a sidewalk from a rope extending from a house to a pole at the edge of the sidewalk, the flag should be hoisted out, union first, from the building.

(i) When the flag is displayed otherwise than by being flown from a staff, it should be displayed flat, whether indoors or out, or so suspended that its folds fall as free as though the flag were staffed.

(j) When the flag is displayed over the middle of the street, it should be suspended vertically with the union to the north in an east and west street or to the east in a north and south street.

(k) When used on a speaker's platform, the flag, if displayed flat, should be displayed above and behind the speaker. When displayed from a staff in a church or public auditorium, if it is displayed in the chancel of a church, or on the speaker's platform in a public auditorium, the flag should occupy the position of honor and be placed at the clergyman's or speaker's right as he faces the congregation or audience. Any other flag so displayed in the chancel or on the platform should be placed at the clergyman's or speaker's left as he faces the congregation or audience. But when the flag is displayed from a staff in a church or public auditorium elsewhere than in the chancel or on the platform it shall be placed in the position of honor at the right of the congregation or audience as they face the chancel or platform. Any other flag so displayed should be placed on the left of the congregation or audience as they face the chancel or platform.

(l) The flag should form a distinctive feature of the ceremony of unveiling a statue or monument, but it should never be used as the covering for the statue or monument.

(m) The flag, when flown at half-staff, should be first hoisted to the peak for an instant and then lowered to the half-staff position. The flag should be again raised to the peak before it is lowered for the day. By "half-staff" is meant lowering the flag to one-half the distance between the top and bottom of the staff. Crepe streamers may be affixed to spearheads or flag-staffs in a parade only by order of the President of the United States.

(n) When the flag is used to cover a casket, it should be so placed that the union is at the head and over the left

shoulder. The flag should not be lowered into the grave or allowed to touch the ground.

Sec. 4. That no disrespect should be shown to the flag of the United States of America, the flag should not be dipped to any person or thing. Regimental colors, State flags, and organization or institutional flags are to be dipped as a mark of honor.

(a) The flag should never be displayed with the union down save as a signal of dire distress.

(b) The flag should never touch anything beneath it, such as the ground, the floor, water, or merchandise.

(c) The flag should never be carried flat or horizontally, but always aloft and free.

(d) The flag should never be used as drapery of any sort whatsoever, never festooned, drawn back, nor up, in folds, but always allowed to fall free. Bunting of blue, white, and red, always arranged with the blue above, the white in the middle, and the red below, should be used for covering a speaker's desk, draping the front of a platform, and for decoration in general.

(e) The flag should never be fastened, displayed, used, or stored in such a manner as will permit it to be easily torn, soiled, or damaged in any way.

(f) The flag should never be used as a covering for a ceiling.

(g) The flag should never have placed upon it, nor on any part of it, nor attached to it any mark, insignia, letter, word, figure, design, picture, or drawing of any nature.

(h) The flag should never be used as a receptacle for receiving, holding, carrying, or delivering anything.

(i) The flag should never be used for advertising purposes in any manner whatsoever. It should not be embroidered on such articles as cushions or handkerchiefs and the like, printed or otherwise impressed on paper napkins or boxes or anything that is designed for temporary use and discard; or used as any portion of a costume or athletic uniform. Advertising signs should not be fastened to a staff or halyard from which the flag is flown.

(j) The flag, when it is in such condition that it is no longer a fitting emblem for display, should be destroyed in a dignified way, preferably by burning.

Sec. 5. That during the ceremony of hoisting or lowering the flag or when the flag is passing in a parade or in a review, all persons present should face the flag, stand at attention, and salute. Those present in uniform should render the military salute. When not in uniform, men should remove the headdress with the right hand

holding it at the left shoulder, the hand being over the heart. Men without hats should salute in the same manner. Aliens should stand at attention. Women should salute by placing the right hand over the heart. The salute to the flag in the moving column should be rendered at the moment the flag passes.

Sec. 6. That when the national anthem is played and the flag is not displayed, all present should stand and face toward the music. Those in uniform should salute at the first note of the anthem, retaining this position until the last note. All others should stand at attention, men removing the headdress. When the flag is displayed, all present should face the flag and salute.

Sec. 7. That the pledge of allegiance to the flag, "I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation indivisible, with liberty and justice for all," be rendered by standing with the right hand over the heart. However, civilians will always show full respect to the flag when the pledge is given by merely standing at attention, men removing the headdress. Persons in uniform shall render the military salute.

Sec. 8. Any rule or custom pertaining to the display of the flag of the United States of America, set forth herein, may be altered, modified, or repealed, or additional rules with respect thereto may be prescribed, by the Commander-in-Chief of the Army and Navy of the United States, whenever he deems it to be appropriate or desirable; and any such alteration or additional rule shall be set forth in a proclamation.

Approved, December 22, 1942.

The American's Creed*

"I believe in the United States of America as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States; a perfect union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

"I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies."

The Pledge to the Flag†

"I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one Nation, indivisible, with liberty and justice for all."

* William Tyler Page, Clerk of the United States House of Representatives, wrote "The American's Creed" in 1917. It was accepted by the House of Representatives on behalf of the American people on April 3, 1918.

† Written by Francis Belamy in August, 1892, of the staff of *The Youth's Companion* in Boston, at the suggestion of James B. Upham, one of the editors.

CROSSWORD PUZZLE

GUIDE



Since most persons who can read and write occasionally or frequently indulge in the indoor pastime of working crossword puzzles, this section is offered as a handy help to solvers who may be stumped now and then for a two-letter word meaning "three-toed sloth" or a three-letter word meaning "native of Min-danao."

We have those two words here, and plenty more. We have the Greek, Roman, Norse and Egyptian deities of myth and legend. And we have those "Greek letters" and "months of the Jewish year" so often needed to fill out little gaps in a crossword solution.

The reader is warned that in mythology there are many confusing and even conflicting accounts of the identities and adventures of the various gods, goddesses and lesser figures. There is also considerable variation in the spelling of names, places and things. For instance, you may spell it ICON, IKON or EIKON, and similar options are plentiful all along the crossword line. If the reader will keep further possible variations in mind, it may help at a critical point in some crossword puzzle. Good hunting!

JOHN KIERAN, *Editor*

First Aid to Crossword Puzzlers

(We cannot, of course, begin to list all the odd words you will meet with in your daily and Sunday crossword puzzles, for such words run into many thousands. But we have tried to include those which turn up most frequently, as well as many others which should be of help to you when you are unable to go any further.)

Also, we do not guarantee that the definitions in your puzzle will be exactly the same as ours, although we have checked every word with a standard dictionary and have followed its definition. In nearly every case, we have used as the key word the principal noun of the definition, rather than any adjective, adjective phrase, or noun used as an adjective. And, to simplify your searching, we have grouped the words according to the number of spaces you have to fill.)

Words of Two Letters

And (French, Latin), ET
Behold, LO
Birthplace: Abraham's, UR
Butterfly: Peacock, IO
Coin: Roman, AS
Egg (Comb. form), OO
Eye (Scotch), EE
Fish: Carplike, ID
Force, OD
God: Babylonian, EA
Egyptian sun, RA
Gold (Heraldry), OR

Language: Artificial, RO
Lava: Hawaiian, AA
Letter: Greek, MU, NU, PI,
XI
Hebrew, HE, PE
Lily: Palm, TI
Measure: Chinese, LI, TU
Metric land, AR
Month: Jewish, AB
Mulberry: Indian, AL
One (Scotch), AE
Pagoda: Chinese, TA

Sloth: Three-toed, AI
The (French), LA, LE
(Spanish), EL, LA
Type: Jumbled, PI
Weight: Chinese, LI
Japanese, MO
Roman, AS
Whirlwind: Faeroe Is., OE
Yes (German), JA
(Italian, Spanish), SI
(Russian), DA

Words of Three Letters

Again, BIS
Age, ERA
Antelope: African, GNU
Apricot: Japanese, UME
Beak, NEB
Beard: Grain, AWN
Beetle: June, DOR
Being, ENS

Beverage: Hawaiian, AVA
Bird: Australian, EMU
Crowlike, JAY
Extinct, MOA
Fabulous, ROC
Frigate, IWA
Sea, AUK
Blackbird, ANI, ANO

Born, NEE
Bronze: Roman, AES
Bugle: Yellow, IVA
By way of, VIA
Canton: Swiss, URI
Cap: Turkish, FEZ
Catnip, NEP
Character: In "Faerie
Queene," UNA

Words of Three Letters—(cont.)

- Coin: Albanian, LEK
 Bulgarian, LEV, LEW
 French, ECU, SOU
 Japanese, SEN, YEN
 Korean, WON
 Peruvian, SOL
 Rumanian, LEU
 Scandinavian, ORE
 Collection: Facts, ANA
 Commune: Belgian, ANS, ATH
 Netherlands, EDE, EPE
 Community: Russian, MIR
 Constellation: Southern, ARA
 Crab: Fiddler, UCA
 Crag: Rocky, TOR
 Cymbals: Oriental, TAL
 Division: Danish territorial, AMT
 Geologic, EON
 Dry (French), SEC
 Dynasty: Chinese, CHI, HAN, SU, WEI, YIN
 Eagle: Sea, ERN
 Earth (Comb. form), GEO
 Egg: Louse, NIT
 Eggs: Fish, ROE
 Equal (Comb. form), ISO
 Extension: building, ELL
 Farewell, AVE
 Fiber: Palm, TAL
 Final, EPI
 Fish: Carplike, IDE
 Pike-like, GAR
 Fleur-de-lis, LIS, LYS
 Food: Hawaiian, POI
 Formerly, NEE
 Friend (French), AMI
 Game: Card, LOO
 Garment: Camel-hair, ABA
 Gateway, DAR
 Gazelle: Tibetan, GOA
 Genus: Grasses, POA
 Herbs or shrubs, IVA
 Rodents (incl. house mice), MUS
 Ruminants (incl. cattle), BOS
 Swine, SUS
 Gibbon: Malay, LAR
 God: Babylonian, ANU, BEL
 Irish sea, LER
 Goddess: Etruscan, UNI
 Governor: Algerian, DEY
 Turkish, BEY
 Grampus, ORC
 Grape, UVA
 Gypsy, ROM
 Hall, AVE
 Hay: Spread for drying, TED
 Herb: Japanese, UDO
 Perennial, PIA
 Used for blue dye, WAD
 Herd: Whales, GAM, POD
 Hero: Spanish, CID
 I love (Latin), AMO
 Indian: Algonquian, SAC, WEA
 Shoshonean, UTE
 Siouan, KAW, OTO
 Tierra del Fuego, ONA
 Ingot, PIG
 Inlet: Narrow, RIA
 Island: Cyclades, IOS
 Dodecanese, COS, KOS (French), ILE
 River, AIT
 John (Gaelic), IAN
 Kobold, NIS
 Lace: To make, TAT
 Language: Artificial, IDO
 Bantu, ILA
 Siamese, LAO, TAI
 Leaf: Palm, OLA, OLE
 Leaving, ORT
 Left: Cause to turn, HAW
 Letter: Greek, CHI, ETA, PHI, PSI, RHO, TAU
 Hebrew, MEM, NUN, SIN, TAV, VAU
 Lettuce, COS
 Lily: Palm, TOI
 Lizard, EFT
 Louse: Young, NIT
 Macaw: Brazilian, ARA
 Marble, TAW
 Match: Shooting (French), TIR
 Meadow, LEA
 Measure: Cloth, ELL
 Dutch or German, AAM
 Electric, MHO, OHM
 Energy, ERG
 Metric land, ARE
 Wire, MIL
 Milk, LAC
 Moccasin, PAC
 Money of account: Anglo-Saxon, ORA, ORE
 Monkey: Capuchin, SAI
 Morsel, ORT
 Mother: Peer Gynt's, ASE
 Mountain: Asia Minor, IDA
 Mulberry: Indian, AAL, ACH, AWL
 Native: Mindanao, ATA
 Neckpiece, BOA
 Newt, EFT
 No (Scotch), NAE
 Note: Guido's highest, ELA
 Ocher: Yellow, SIL
 Ornament: Pagoda, TEE
 Ox: Tibetan, YAK
 Pagoda: Chinese, TAA
 Parrot: New Zealand, KEA
 Part: Footlike, PES
 Particle: Electrified, ION
 Pasha, DEY
 Pass: Mountain, COL
 Peasant: Philippine, TAO
 Penpoint, NEB
 Pigeon, NUN
 Pistol (Slang), GAT
 Plant: Pepper, AVA
 Priest: Biblical high, ELI
 Prince: Ethiopian, RAS
 Pseudonym: Dickens', BOZ
 Queen: Fairy, MAB
 Record: Ship's, LOG
 Refuse: Flax (Scotch), PAB, POB
 Resin, LAC
 Resort, SPA
 Revolver (Slang), GAT
 Right: Cause to turn, GEE
 River (Spanish), RIO
 Room: Harem, ODA
 Rose (Persian), GUL
 Ruff: Female, REE
 Rule: Indian, RAJ
 Sailor, GOB, TAR
 Saint: Female (abbr.), STE
 Salt, SAL
 Sash: Japanese, OBI
 Scrap, ORT
 Seed: Poppy, MAW
 Self, EGO
 Sesame, TIL
 Sheep: Female, EWE
 Indian, SHA
 Male, RAM
 Shelter, LEE
 Shield, ECU
 Shooting match (French), TIR
 Shrew: European, ERD
 Shrub: Evergreen, YEW
 Silkworm, ERI
 Snake, ASP, BOA
 Soak, RET
 Son-in-law: Mohammed's, ALI
 Sorrel: Wood, OCA
 Spot: Playing-card, PIP
 Spring: Mineral, SPA
 Sprite: Water, NIX
 Stern: Toward, AFT
 Stomach: Bird's, MAW
 Summer (French), ETE
 Sun, SOL
 Swamp, BOG, FEN
 Swan: Male, COB
 Tea: Chinese, CHA
 Temple: Shinto, SHA
 The (German), DAS, DEM, DEN, DER, DES, DIE (French), LES (Spanish), LAS, LOS
 Thing (Law), RES
 Title: Etruscan, LAR
 Monk's, FRA
 Portuguese, DOM
 Spanish, DON
 Turkish, BEY
 Tool: Cutting, ADZ, AXE
 Mining, GAD
 Piercing, AWL
 Tree: Candlenut, AMA
 Central American, EBO

Hawaiian, KOA
Linden, LIN
New Zealand, AKE
Rubber, ULE
South American, APA
Tribe: New Zealand, ATI
Turmeric, REA
Twice, BIS
Twin: Siamese, ENG
Uncle (Dialect), EAM, EME
Vessel: Wine, AMA
Vestment: Ecclesiastical,

ALB
Vetch: Bitter, ERS
Wallaba, APA
Wapiti, ELK
Water (French), EAU
Way, VIA
Weight: Chinese, HAO, KIN,
TAN
Egyptian, OKA, OKE
Indian, SER
Japanese, FUN, RIN
Mongolian, LAN

Roman, BES
Siamese, BAT
Turkish, OKA, OKE
Whales: Herd, GAM, POD
Wing, ALA
Witticism, MOT
Wolframite, CAL
Worm: African, LOA
Wreath: Hawaiian, LEI
Yale, ELI
Yes (French), OUI
Z (Letter), ZED

Words of Four Letters

Animal: Footless, APOD
Antelope: African, KUDU
Apoplexy: Plant, ESCA
Apricot, ANSU
Armadillo, APAR, PEBA
Ascetic: Mohammedan,
SUF
Avatar: Of Vishnu, RAMA
Band: Horizontal (heraldry), FESS
Bark: Mulberry, TAPA
Base: Column, DADO
Bearing (Heraldry), ORLE
Beige, ECRU
Being, ESSE
Beverage: Japanese rice,
SAKE
Bird: Egyptian sacred, IBIS
Extinct, DODO
Flightless, KIWI
Gull-like, TERN
Unfledged, EYAS
Birds: As class, AVES
Black, EBON
Blackbird: European, MERL
Caliph: Mohammedan,
OMAR
Cap: Military, KEPI
Cape, NESS
Capital: Ancient Irish,
TARA
Case: Article, ETUI
Chamber: Indian ceremonial, KIVA
Channel: Brain, ITER
Cheese: Dutch, EDAM
Chest: Sepulchral stone,
CIST
Chieftain: Arab, EMIR
Church: Part of, APSE,
NAVE
(Scotch), KIRK
Claim (Law), LIEN
Cluster: Flower, CYME
Coin: Chinese, TAEI
German, MARK
Indian, ANNA
Iranian, RIAL
Italian, LIRA
Moroccan, OKIA
Siamese, BAHT
South American, PESO
Spanish, DURO, PESO
Turkish, PARA

Commune: Belgian, AATH
Composition: musical, OPUS
Council: Russian, DUMA
Covering: Seed, ARIL
Cry: Bacchanalian, EVOE
Cup (Scotch), TASS
Cupbearer, SAKI
Dagger, DIRK
Malay, KRIS
Dash, ELAN
Date: Roman, IDES
Dean: English, INGE
Disease: Skin, ACNE
Disk: Solar, ATEN
Dog: Hunting, ALAN
Duck, SMEE, SMEW, TEAL
Dynasty: Chinese, CHEN,
CHIN, CHOU, CHOW,
HSIA, MING, SUNG,
TANG, TSIN
Mongol, YUAN
Eagle: Biblical, GIER
Sea, ERNE
Egyptian: Christian, COPT
Entrance: Mine, ADIT
Esau, EDOM
Fairy: Persian, PERI
Family: Italian, ESTE
Farewell, VALE
Fish: Herringlike, SHAD
Mackerellike, CERO
Sea, LING, MERO, OPAH
Food: Tropical, TARO
Foot: Metric, IAMB
Founder: Carthage, DIDO
France: Southern, MIDI
Furze, ULEX
Gaelic, ERSE
Gaiter, SPAT
Game: Card, FARO, SKAT
Garment: Hindu, SARI
Roman, TOGA
Gazelle, CORA
Genus: Amphibians (incl.
frogs), RANA
Amphibians (incl. tree
toads), HYLEA
Auks, ALCA
Bees, APIS
Cetaceans, INIA
Ducks (incl. mallards),
ANAS
Herbs, ARUM, GEUM
Lilies, ALOE
Sea birds, SULA

Shrubs, ITEA, ULEX
Swans, OLOR
Trees, chocolate, COLA
Trees (incl. maples),
ACER
Trees (olives), OLEA
Goat: Wild, IBEX
God: Hindu, SIVA
Phrygian, ATYS
Semitic, BAAL
Goddess: Hawaiian, PELE
Hindu, DEVI
Grafted (Heraldry), ENTE
Grandfather (Obsolete),
AIEL
Gray (French), GRIS
Green (Heraldry), VERT
Hammer-head: Part of,
PEEN
Hartebeest, ASSE, TORA
Hautboy, OBOE
Hawk: Taken from nest
(falconry), EYAS
Hearing (Law), OYER
Herb: Aromatic, ANET,
DILL
Fabulous, MOLY
Perennial, GEUM, SEGO
Pot, WORT
Used for blue dye, WADE,
WOAD
Hill: Sand, DENE, DUNE
Hoarfrost, RIME
Hog: Immature female,
GILT
Image, ICON, IKON
Incarnation: Of Vishnu,
RAMA
Indian: Algonquian, CREE,
SAUK
Central American, MAYA
Iroquoian, ERIE
Mexican, CORA
Peruvian, CANA, INCA,
MORO
Shoshonean, HOPI
Siouan, OTOE
Southwestern, HOPI,
PIMA, YUMA, ZUNI
Insect: Immature, PUPA
Ireland, EIRE, ERIN
Jar, OLLA
Kiln, OAST
Knife: Philippine, BOLO

Words of Four Letters—(cont.)

- Lake: Mountain, TARN
 (Scotch), LOCH
 Lamp: Miner's, DAVY
 Landing place: Indian, GHAT
 Language: Buddhist, PALI
 Japanese, AINU
 Latvian, LETT
 Leaf: Palm, OLLA
 Leopard, PARD
 Let it stand, STET
 Letter: Greek, BETA, IOTA, ZETA
 Hebrew, AYIN, BETH, CAPH, KOPH, RESH, SHIN, TETH, YODH
 Papal, BULL
 Lizard, GILA
 Magistrate: Genoese or Venetian, DOGE
 Man (Latin), HOMO
 Measure: Electric, VOLT, WATT
 Force, DYNE
 Hebrew, OMER
 Printing, PICA
 Swiss land, IMMI
 Medley, OLIO
 Merganser, SMEW
 Molding: Curved, OGEE
 Monk: Tibetan, LAMA
 Monkhood, ATIS
 Month: Jewish, ADAR, ELUL, IYAR
 Native: Philippine, MORO
 Network, RETE
 Noble: Mohammedan, AMIR
 Number: Irrational, SURD
 Nurse: Oriental, AMAH
 Nursemaid: Indian, AYAH
 Ox: Celebes wild, ANOE
 Parliament, DIET
 Parrot: New Zealand, KAKA
 Pass: Indian mountain, GHAT
 Passage: Closing (Music), CODA
 Peasant: Indian, RYOT
 Perfume, ATAR
 Pickerel or pike, ESOX
 Pitcher, EWER
 Plant: Aromatic, NARD
 Century, ALOE
 Indigo, ANIL
 Pepper, KAVA
 Platform: Raised, DAIS
 Plum: Wild, SLOE
 Pods: Vegetable, OKRA, OKRO
 Poem: Epic, EPOS
 Poet: Roman, OVID
 Portico: Greek, STOA
 Premium, AGIO
 Priest: Mohammedan, IMAM
 Prima donna, DIVA
 Pseudonym: Lamb's, ELIA
 Queen: Carthaginian, DIDO
 Hindu, RANI
 Rabbit, CONY
 Race: Of Japan, AINU
 Rail: Ducklike, COOT
 North American, SORA
 Reliquary, ARCA
 Resort: Italian, LIDO
 Road: Roman, ITER
 Rockfish: California, RENA
 Rodent: South American, PACA
 Rootstock, TARO
 Salamander, NEWT
 Salmon: Young, PARR
 Same (Greek), HOMO (Latin), IDEM
 Sauce: Fish, ALEC
 School: English, ETON
 Seaweed, AGAR, ALGA
 Seed: Dill, ANET
 Serf, ILOT
 Shield, EGIS
 Ship: Jason's, ARGO
 Left side of, PORT
 Two-masted, BRIG
 Silkworm, ERIA
 Slave, ESNE
 Snow: Glacial, NEVE
 Song (German), LIED
 Unaccompanied, GLEE
 Sour, ACID
 Sow: Young, GILT
 Spirit: Buddhist evil, MARA
 Stake: Poker, ANTE
 Star: Temporary, NOVA
 Strap: Bridle, REIN
 Strewn (Heraldry), SEME
 Sweetsop, ATEs, ATTA
 Sword: Fencing, EPEE, FOIL
 Tapir: Brazilian, ANTA
 Tea: South American, MATE
 Therefore (Latin), ERGO
 Tissue, TELA
 Title: Etruscan, LARS
 Indian, RAJA
 Mohammedan, EMIR, IMAM
 Spanish, DONA
 Toad: Tree, HYLA
 Tool: Cutting, ADZE
 Track: Deer, SLOT
 Tract: Sandy, DENE
 Tree: Apple, SORB
 Central American, EBOE
 East Indian, TEAK
 Eucalyptus, YATE
 Guiana and Trinidad, MORA
 Javanese, UPAS
 Linden, LIME, LINN, TEIL, TILL
 Sandarac, ARAR
 Sassafras, AGUE
 Tamarisk salt, ATLE
 Tribe: Moro, SULU
 Trout, CHAR
 Urchin: Street, ARAB
 Vessel: Arab, DHOW
 Vestment: Ecclesiastical, COPE
 Vortex, EDDY
 Wampum, PEAG
 Wapiti, STAG
 Waste: Allowance for, TRET
 Water (Spanish), AGUA
 Wavy (Heraldry), ONDE, UNDE
 Weight: Greek, MINA
 Siamese, BAHT
 Whale, CETE
 Whirlpool, EDDY
 Willow: Virginia, ITEA
 Winged, ALAR (Heraldry), AILE
 Wings, ALAE
 Without (French), SANS
 Wool: To comb, CARD
 Work, OPUS
 Wrong: Civil, TORT

Words of Five Letters

- Abode of dead: Babylonian, ARALU
 Aftersong, EPODE
 Animal: Footless, APODE
 Antelope: African, ELAND
 Association: Russian, ARTEL
 Secret, CABAL
 Award: Motion-picture, OSCAR
 Basket: Fishing, CREEL
 Bird: Larklike, PIPIT
 Oscine, VIREO
 Black (Heraldry), SABLE
 Blackbird: European, MERLE, OUSEL, OUZEL
 Blue (Heraldry), AZURE
 Boat: Eskimo, BIDAR, UMIK
 Bobwhite, COLIN, QUAIL
 Bone (Comb. form), OSTEO
 Leg, TIBIA
 Thigh, FEMUR
 Canoe: Eskimo, BIDAR, KAYAK
 Caravansary, SERAI
 Card: Old playing, TAROT
 Cephalopod, SQUID
 Cetacean, WHALE

- Chariot, ESSED
 Chieftain: Arab, EMEER
 Child (Scotch), BAIRN
 Cigar, CLARO
 Coating: Seed, TESTA
 Coin: Costa Rican, COLON
 Danish, KRONE
 Ecuadorian, SUCRE
 English, Groat, PENCE
 French, FRANC
 German, KRONE, TALER
 Hungarian, PENGO
 Icelandic, KRONA
 Indian, RUPEE
 Iraqi, DINAR
 Norwegian, KRONE
 Polish, ZLOTY
 Russian, COPEC, KOPEK, RUBLE
 Swedish, KRONA
 Turkish, ASPER; Yugoslav, DINAR
 Composition: Choral, MOTET
 Compound: Chemical, ESTER
 Conceal (Law), ELOIN
 Council: Ecclesiastical, SYNOD
 Court: Anglo-Saxon, GEMOT
 Inner, PATIO
 Crest: Mountain, ARETE
 Crown: Papal, TIARA
 Cuttlefish, SEPIA
 Date: Roman, NONES
 Decree: Mohammedan, IRADE
 Russian, UKASE
 Deposit: Loam, LOESS
 Desert: Gobi, SHAMO
 Devilfish, MANTA
 Disk, PATEN
 Dog: Australian wild, DINGO
 Drum, TABOR
 Duck: Sea, EIDER
 Dynasty: Chinese, CHING, LIANG, SHANG
 Earthquake, SEISM
 Eel, ELVER, MORAY
 Ermine: European, STOAT
 Fabulist, AESOP
 Family: Italian, CENCI
 Fiber: West Indian, SISAL
 Fig: Smyrna, ELEME, ELEMI
 Figure: Of speech, TROPE
 Fish: American small, KILLY
 Flower: Garden, ASTER
 Friend (Spanish), AMIGO
 Fungus: Rye, ERGOT
 Furze, GORSE
 Genus: Cats, FELIS
 Dogs, CANIS
 Geese, ANSER
 Hares, rabbits, LEPUS
 Herbs, APIOS
 Lizards, AGAMA
 Palms, ARECA
 Ruminants (goats), CAPRA
 Shrubs (heath), ERICA
 Trees (elms), ULMUS
 God: Hindu, SHIVA
 Phrygian, ATTIS
 Welsh, DYLAN
 Group: Of six, HEXAD
 Grove: Sacred to Diana, NEMUS
 Guitar: Hindu, SITAR
 Hartebeest, CAAMA
 Headdress: Jewish or Persian, TIARA
 Heath, ERICA
 Herb: Grasslike marsh, SEDGE
 Heron, EGRET
 Image, EIKON
 Indian: Iroquoian, HURON
 Mexican, AZTEC, OPATA, OTOMI
 Muskhogan, CREEK
 Siouan, OSAGE, TETON
 Spanish American, CARIB
 Insect: Immature, LARVA
 Iris: Yellow, SEDGE
 Juniper, GORSE
 Kobold, NISSE
 Land: Cultivated, ARADA
 Landholder (Scotch), LAIRD, THANE
 Language: Dravidian, TAMIL
 Lariat, LASSO, REATA
 Laughing, Riant
 Lawgiver: Athenian, DRACO, SOLON
 Leaf: Calyx, SEPAL
 Fern, FROND
 Lemur, LORIS
 Letter: Greek, ALPHA, DELTA, GAMMA,
 KAPPA, OMEGA, SIGMA, THETA
 Hebrew, ALEPH, CHETH, GIMEL,
 SADHE, ZAYIN
 Lighthouse, PHARE
 Lizard: Old World, AGAMA
 Louse: Plant, APHID
 Mammal: Civetlike, GENET
 Giraffelike, OKAPI
 Marble, AGATE
 Mark: Insertion, CARET
 Market place: Greek, AGORA
 Marsupial: Australian, KOALA
 Measure: Electric, FARAD, HENRY
 Energy, JOULE
 Metric, LITER, STERE
 Printing, AGATE
 Russian, VERST
 Mixture: Smelting, MATTE
 Mohicans: Last of, UNCAS
 Molding: Convex, OVOLO, TORUS
 Monkshood, ATEES
 Month: Jewish, NISAN, SIVAN, TEBET
 Musketeer, ATHOS
 Native: Aleutian, ALEUT
 New Zealand, MAORI
 Neckpiece: Ecclesiastical, AMICE
 Nerve (Comb. form), NEURO
 Nest: Eagle's or hawk's, AERIE
 Insect's NIDUS
 Net: Fishing, SEINE
 Newsstand, KIOSK
 Noble: Mohammedan, AMEER
 Nostrils, NARES
 Notched irregularly, EROSE
 Nymph: Mohammedan, HOURI
 Official: Roman, EDILE
 Opening: Mouthlike, STOMA
 Oration: Funeral, ELOGE
 Ostiole, STOMA
 Palm, ARECA, BETEL
 Park: Colorado, ESTES
 Perfume, ATTAR
 Pillar: Stone, STELA, STELE
 Plant: Century, AGAVE

Words of Five Letters—(cont.)

- Climbing, LIANA
 Dwarf, CUMIN
 Medicinal, SENNA
 Mustard family, CRESS
 Plate: Communion, PATEN
 Poem: Lyric, EPODE
 Point: Lowest, NADIR
 Poplar, ABELE, ALAMO, ASPEN
 Post: Stair, NEWEL
 Priest: Mohammedan, IMAUM
 Queen: Hindu, RANEE
 Rabbit, CONEY
 Rail, CRAKE
 Red (Heraldry), GULES
 Religion: Moslem, ISLAM
 Revoke (Law), ADEEM
 Ridge: Gravelly and sandy, ESKAR, ESKER
 Rockfish: California, REINA
 Rootstock: Fragrant, ORRIS
 Ruff: Female, REEVE
 Salt: Ethereal, ESTER
 Saltpeter, NITER, NITRE
 Salutation: Eastern, SALAM
 School: Fish, SHOAL
 French public, LYCEE
 Scriptures: Mohammedan, KORAN
 Seed: Aromatic, ANISE
 Seraglio, HAREM, SERAI
 Serf, HELOT
 Sheeplike, OVINE
 Shield, AEGIS
 Shoe: Wooden, SABOT
 Shot: Billiard, CAROM, MASSE
 Shrub: Burning bush, WAHOO
 Used in tanning, SUMAC
 Silk: Watered, MOIRE
 Sister (Latin), SOROR
 Six: Group of, HEXAD
 Skeleton: Marine, CORAL
 Slave, HELOT
- Snake, ADDER, COBRA
 Soldier: French, POILU; Indian, SEPOY
 Sour, ACERB
 Spirit: Air, ARIEL
 Staff: Shepherd's, CROOK
 Starwort, ASTER
 Stockade: Russian, ETAPE
 Stop (Nautical), AVAST
 Storehouse, ETAPE
 Subway: Parisian, METRO
 Tea: Paraguayan, YERBA
 Terminal: Positive, ANODE
 Theater: Greek, ODEON, ODEUM
 Thread: Surgical, SETON
 Title: Indian, RAJAH, SAHEB, SAHIB
 Mohammedan, EMEER, IMAUM
 Tree: East Indian cotton, SIMAL
 Hickory, PECAN
 Light-wooded, BALSA
 Mediterranean, CAROB
 Mexican pine, OCOTE
 New Zealand, MAIRE
 Tamarack, LARCH
 Tamarisk salt, ATLEE
 West Indian, ACANA
 Trout, CHARR
 Troy, ILION, ILIUM
 Twin: Siamese, CHANG
 Vestment: Ecclesiastical, STOLE
 Violin: Famous, AMATI, STRAD
 Volcano: Mud, SALSE
 Wampum, PEAGE
 Wavy (Heraldry), UNDEE
 Weight: Jewish, GERAH
 Wheel: Persian water, NORIA
 Willow, OSIER
 Window: Bay, ORIEL
 Wine, MEDOC, LINTA, TOKAY
 Year: Excess of solar over lunar, EPACT
 Zoroastrian, PARSI

Words with Six or More Letters

- Alkaloid: Crystalline, ESERIN, ESERINE
 Ant: White, TERMITE
 Antelope: African, DIKDIK, DUKER
 Ass: Asian wild, ONAGER
 Babylonian, ELAMITE
 Badge: Shoulder, EPAULET
 Beetle, ELATER
 Bird: South American, SERIEMA
 Bone: Leg, FIBULA
 Brother (Latin), FRATER
 Bunting: European, ORTOLAN
 Canoe: Eskimo, BAIAR, OOMIAK
 Caravansary, IMARET
 Cat: Leopardlike, OCELOT
 Cenobite, ESSENE
 Centerpiece: Table, EPERGNE
 Cetacean, DOLPHIN, PORPOISE
 Chariot, ESSEDA, ESSEDE
 Chief: Seminole, OSCEOLA
 Claim: Release as (law), REMISE
 Clock: Water, CLEPSYDRA
 Cloud, CUMULUS, NIMBUS
 Coach: French hackney, FIACRE
 Coin: Czechoslovakian, KORUNA
 Ethiopian, TALARI
 Finnish, MARKKA
 German, THALER
 Greek, DRACHMA
 Haitian, GOURDE
 Honduran, LEMPIRA
 Hungarian, FORINT
 Indo-Chinese, PIASTER
 Netherlands, GUILDER
 Panamanian, BALBOA
 Paraguayan, GUARANI
 Portuguese, ESCUDO
 Russian, COPECK, KOPECK, ROUBLE
 Spanish, PESETA
 Venezuelan, BOLIVAR
 Communion: Last holy, VIATICUM
 Conceal (Law), ELOIGN
 Construction: Sentence, SYNTAX
 Court: Anglo-Saxon, GEMOTE
 Cow: Sea, DUGONG, MANATEE
 Cylindrical, TERETE
 Dagger, STILETTO
 Malay, CREESE, KREESE
 Date: Roman, CALENDIS, KALENDIS
 Deer, CARIBOU, WAPITI
 Doorkeeper, OSTIARY

- Dragonflies: Order of, ODNATA
 Drink: Of gods, NECTAR
 Drum, TABOUR
 Moorish, ATABAL
 Dynasty: Chinese, MANCHU
 Edit, REDACT
 Envelope: flower, PERIANTH
 Eskimo, AMERIND
 Excuse (Law), ESSOIN
 Eyespots, OCELLI
 Figure: Used as column, CARYATID,
 TELAMON
 Five: Group of, PENTAD
 Fly: African, TSETSE
 Foot: Metric, ANAPEST, IAMBUS
 Frying pan, SPIDER
 Fur, KARAKUL
 Galley: Greek or Roman, BIREME,
 TRIEME
 Game: Card, ECARTE
 Genus: Mints (incl. catnip), NEPETA
 Mollusks (incl. oysters), OSTREA
 Trees (incl. dogwood), CORNUS
 Gland: Salivary, RACEMOSE
 God: Hindu, BRAHMA, VISHNU
 Government, POLITY
 Governor: Persian, SATRAP
 Grandson (Scotch), NEPOTE
 Group: Of five, PENTAD
 Of nine, ENNEAD
 Of seven, HEPTAD
 Hare: In first year, LEVERET
 Harpsichord, SPINET
 Herb: Alpine, EDELWEISS
 South African, FREESIA
 Hermit, EREMITTE
 Idiot, CRETIN
 Implement: Stone, NEOLITH
 Incarnation: Hindu, AVATAR
 Indian: Iroquoian, SENECA
 Southwestern, APACHE
 Insects: Order of, DIPTERA
 Kettledrum, ATABAL
 King: Fairy, OBERON
 Kneecap, PATELLA
 Knife, MACHETE
 Legislature: Spanish, CORTES
 Letter: Greek, EPSILON, LAMBDA, OMI-
 CRON, UPSILON
 Hebrew, DALETH, LAMEDH, SAMEKH
 Lighthouse, PHAROS
 Lizard, IGUANA
 Lockjaw, TETANUS
 Man (Spanish), HOMBRE
 Massacre, POGROM
 Mayor: Spanish, ALCALDE
 Measure: Electric, AMPERE, COULOMB,
 KILOWATT
 Medicine: Quack, NOSTRUM
 Member: Religious order, CENOBITE
 Molasses, TREACLE
 Monster, CHIMERA, GORGON
 (Comb. form), TERATO
 Cretan, MINOTAUR
 Month: Jewish, HESHVAN, KISLEV, SHE-
 BAT, TAMMUZ, TISHRI, VEADAR
 Mulct, AMERCE
 Musketeer, ARAMIS, PORTHOS
 Nearighted, MYOPIC
 Net, TRAMMEL
 New York City, GOTHAM
 Nine: Group of, ENNEAD
 Official: Roman, AEDILE
 Order: Dragonflies, ODNATA
 Insects, DIPTERA
 Organ: Plant, PISTIL
 Ornament: Shoulder, EPAULET
 Overcoat: Military, CAPOTE
 Oxidation: Bronze or copper, PATINA
 Pipe: Peace, CALUMET
 Plaid (Scotch), TARTAN
 Plain: Treeless, TUNDRA
 Plant: Century, MAGUEY
 On rocks, LICHEN
 Plowing: Fit for, ARABLE
 Poem: Heroic, EPOPEE
 Six-lined, SESTET
 Point: Highest, ZENITH
 Potion: Love, PHILTRE, PHILTRE
 Purple (Heraldry), PURPURE
 Queen: Fairy, TITANIA
 Race: Skiing, SLALOM
 Ring: Harness, TERRET
 Sailor: East Indian, LASCAR
 Salutation: Eastern, SALAAM
 Sandy, ARENOSE
 Saw: Surgical, TREPAN
 Seven: Group of, HEPTAD
 Sexes: Common to both, EPICENE
 Shawl: Mexican, SERAPE
 Sheathing: Flower, SPATHE
 Sheep: Asian wild, ARGALI
 Shoes: Mercury's winged, TALARIA
 Shortening: Syllable, SYSTOLE
 Shrub, SPIRAEA
 Sickle-shaped, FALCATE
 Silver (Heraldry), ARGENT
 Spiral, HELICAL
 Staff: Bishop's, CROSIER, CROZIER
 Stalk: Plant, PETIOLE
 State: Swiss, CANTON
 Studio, ATELIER
 Swan: Young, CYGNET
 Swimming, NATANT
 Sword-shaped, ENSATE
 Terminal: Negative, CATHODE
 Third (Music), TIERCE
 Tile: Pertaining to, TEGULAR
 Tomb: Empty, CENOTAPH
 Tooth (Comb. form), ODONTO
 Tower: Mohammedan, MINARET
 Tree: Locust, ACACIA
 Urn: Tea, SAMOVAR
 Verbose, PROLIX
 Viceroy: Egyptian, KHEDIVE
 Warehouse (French), ENTREPOT
 Whirlpool, VORTEX
 Will: Having left, TESTATE
 Wind, CHINOOK, MONSOON, SIMOOM,
 SIMOON, SIROCCO
 Window: In roof, DORMER
 Wine, CHABLIS
 Wolfish, LUPINE
 Woman: Boisterous, TERMAGANT
 Workshop, ATELIER
 Zoroastrian, PARSEE

Greek and Roman Mythology

(Most of the Greek deities were adopted by the Romans, although in many cases there was a change of name. In the list below, information is given under the Greek name; the name in parentheses is the Latin equivalent. However, all Latin names are listed with cross references to the Greek ones. In addition, there are several deities which were exclusively Roman.)

ACHERON: *See* Rivers.

ACHILLES: Greek warrior; slew Hector at Troy; slain by Paris, who wounded him in his vulnerable heel.

ACTAEON: Hunter; surprised Artemis bathing; changed by her to stag and killed by his dogs.

ADMETUS: King of Thessaly; his wife, Alcestis, offered to die in his place.

ADONIS: Beautiful youth loved by Aphrodite.

AEACUS: One of three judges of dead in Hades; son of Zeus.

AEEETES: King of Colchis; father of Medea; keeper of Golden Fleece.

AEGEUS: Father of Theseus; believing Theseus killed in Crete, he drowned himself, Aegean Sea named for him.

AEGISTHUS: Son of Thyestes; slew Atreus; with Clytemnestra, his paramour, slew Agamemnon; slain by Orestes.

AEGYPTUS: Brother of Danaüs; his sons, except Lynceus, slain by Danaïdes.

AENEAS: Trojan; son of Anchises and Aphrodite; after fall of Troy, led his followers eventually to Italy; loved and deserted Dido.

AEOLUS: *See* Winds.

AESCLAPIUS: *See* Asclepius.

AESON: King of Iolus; father of Jason; overthrown by his brother Pelias; restored to youth by Medea.

AETHER: Personification of sky.

AETHRA: Mother of Theseus.

AGAMEMNON: King of Mycenae; son of Atreus; brother of Menelaus; leader of Greeks against Troy; slain on his return home by Clytemnestra and Aegisthus.

AGLAIA: *See* Graces.

AJAX: Greek warrior; killed himself at Troy because Achilles' armor was awarded to Odysseus.

ALCESTIS: Wife of Admetus; offered to die in his place but saved from death by Hercules.

ALCMENE: Wife of Amphitryon; mother by Zeus of Hercules.

ALCYONE: *See* Pelelades.

ALECTO: *See* Furies.

ALECTRYON: Youth changed by Ares into cock.

ALTHAEA: Wife of Oeneus; mother of Meleager.

AMAZONS: Female warriors in Asia Minor; supported Troy against Greeks.

AMOR: *See* Eros.

AMPHION: Musician; husband of Niobe; charmed stones to build fortifications for Thebes.

AMPHITRITE: Sea goddess; wife of Poseidon.

AMPHITRYON: Husband of Alcmene.

ANCHISES: Father of Aeneas.

ANCILE: Sacred shield that fell from heavens; palladium of Rome.

ANDRAEMON: Husband of Dryope.

ANDROMACHE: Wife of Hector.

ANDROMEDA: Daughter of Cepheus; chained to cliff for monster to devour; rescued by Perseus.

ANTEIA: Wife of Proetus; tried to induce Bellerophon to elope with her.

ANTEROS: God who avenged unrequited love.

ANTIGONE: Daughter of Oedipus; accompanied him to Colonus; performed burial rite for Polynices and was buried alive.

ANTINOÜS: Leader of suitors of Penelope; slain by Odysseus.

APHRODITE (VENUS): Goddess of love and beauty; daughter of Zeus; mother of Eros.

APOLLO: God of beauty, poetry, music; later identified with Helios as Phoebus Apollo; son of Zeus and Leto.

AQUILIO: *See* Winds.

ARACHNE: Maiden who challenged Athena to weaving contest; changed to spider.

ARES (MARS): God of war; son of Zeus and Hera.

ARGO: Ship in which Jason and followers sailed to Colchis for Golden Fleece.

ARGUS: Monster with hundred eyes; slain by Hermes; his eyes placed by Hera into peacock's tail.

ARIADNE: Daughter of Minos; aided Theseus in slaying Minotaur; deserted by him on island of Naxos and married to Dionysus.

ARION: Musician; thrown overboard by pirates but saved by dolphin.

ARTEMIS (DIANA): Goddess of moon; huntress; twin sister of Apollo.

ASCLEPIUS (AESCLAPIUS): Mortal son of Apollo; slain by Zeus for raising dead; later deified as god of medicine. Also known as Asklepios.

ASTARTE: Phoenician goddess of love; variously identified with Aphrodite, Selene, and Artemis.

- ASTRAEA:** Goddess of Justice; daughter of Zeus and Themis.
- ATALANTA:** Princess who challenged her suitors to a foot race; Hippomenes won race and married her.
- ATHENA (MINERVA):** Goddess of wisdom; known poetically as Pallas Athene; sprang fully armed from head of Zeus.
- ATLAS:** Titan; held world on his shoulders as punishment for warring against Zeus; son of Iapetus.
- ATREUS:** King of Mycenae; father of Menelaus and Agamemnon; brother of Thyestes, three of whose sons he slew and served to him at banquet; slain by Aegisthus.
- ATROPOS:** *See* Fates.
- AURORA:** *See* Eos.
- AUSTER:** *See* Winds.
- AVERNUS:** Infernal regions; name derived from small vaporous lake near Vesuvius which was fabled to kill birds and vegetation.
- BACCHUS:** *See* Dionysus.
- BELLEROPHON:** Corinthian hero; killed Chimera with aid of Pegasus; tried to reach Olympus on Pegasus and was thrown to his death.
- BELLONA:** Roman goddess of war.
- BOREAS:** *See* Winds.
- BRIAREUS:** Monster of hundred hands; son of Uranus and Gaea.
- BRISEIS:** Captive maiden given to Achilles; taken by Agamemnon in exchange for loss of Chryseis, which caused Achilles to cease fighting, until death of Patroclus.
- CADMUS:** Brother of Europa; planter of dragon seeds from which first Thebans sprang.
- CALLIOPE:** *See* Muses.
- CALYPSO:** Sea nymph; kept Odysseus on her island Ogygia for seven years.
- CASSANDRA:** Daughter of Priam; prophetess who was never believed; slain with Agamemnon.
- CASTOR:** *See* Dioscuri.
- CELAENO:** *See* Pleiades.
- CENTAURS:** Beings half man and half horse; lived in mountains of Thessaly.
- CEPHALUS:** Hunter; accidentally killed his wife Procris with his spear.
- CEPHEUS:** King of Ethiopia; father of Andromeda.
- CERBERUS:** Three-headed dog guarding entrance to Hades.
- CERES:** *See* Demeter.
- CHAOS:** Formless void; personified as first of gods.
- CHARON:** Boatman on Styx who carried souls of dead to Hades; son of Erebus.
- CHARYBDIS:** Female monster; personification of whirlpool.
- CHIMERA:** Female monster with head of lion, body of goat, tail of serpent; killed by Bellerophon.
- CHIRON:** Most famous of centaurs.
- CHRONOS:** Personification of time.
- CHRYSEIS:** Captive maiden given to Agamemnon; his refusal to accept ransom from her father Chryses caused Apollo to send plague on Greeks besieging Troy.
- CIRCE:** Sorceress; daughter of Helios; changed Odysseus' men into swine.
- CLIO:** *See* Muses.
- CLOTHO:** *See* Fates.
- CLYTEMNESTRA:** Wife of Agamemnon, whom she slew with aid of her paramour, Aegisthus; slain by her son Orestes.
- COCYTUS:** *See* Rivers.
- CREON:** Father of Jocasta; forbade burial of Polynices; ordered burial alive of Antigone.
- CREUSA:** Princess of Corinth, for whom Jason deserted Medea; slain by Medea, who sent her poisoned robe; also known as Glauke.
- CREUSA:** Wife of Aeneas; died fleeing Troy.
- CRONUS (SATURN):** Titan; god of harvests; son of Uranus and Gaea; dethroned by his son Zeus.
- CUPID:** *See* Eros.
- CYBELE:** Anatolian nature goddess; adopted by Greeks and identified with Rhea.
- CYCLOPES:** Race of one-eyed giants (singular: Cyclops).
- DAEDALUS:** Athenian artificer; father of Icarus; builder of Labyrinth in Crete; devised wings attached with wax for him and Icarus to escape Crete.
- DANAË:** Princess of Argos; mother of Perseus by Zeus, who appeared to her in form of golden shower.
- DANAÏDES:** Daughters of Danaüs; at his command, all except Hypermnestra slew their husbands, the sons of Aegyptus.
- DANAÏDES:** Brother of Aegyptus; father of Danaïdes; slain by Lynceus.
- DAPHNE:** Nymph; pursued by Apollo; changed to laurel tree.
- DECUMA:** *See* Fates.
- DEINO:** *See* Graeae.
- DEMETER (CERES):** Goddess of agriculture; mother of Persephone.
- DIANA:** *See* Artemis.
- DIDO:** Founder and queen of Carthage; stabbed herself when deserted by Aeneas.
- DIOMEDES:** Greek hero; with Odysseus, entered Troy and carried off Palladium, sacred statue of Athena.
- DIOMEDES:** Owner of man-eating horses, which Hercules, as ninth labor, carried off.

DIONE: Titan goddess; mother by Zeus of Aphrodite.

DIONYSUS (BACCHUS): God of wine; son of Zeus and Semele.

DIOSCURI: Twins Castor and Pollux; sons of Leda by Zeus.

DIS: See Hades.

DRYADS: Wood nymphs.

DRYOPE: Maiden changed to Hamadryad.

ECHO: Nymph who fell hopelessly in love with Narcissus; faded away except for her voice.

ELECTRA: Daughter of Agamemnon and Clytemnestra; sister of Orestes; urged Orestes to slay Clytemnestra and Aegisthus.

ELECTRA: See Pleiades.

ELYSIUM: Abode of blessed dead.

ENDYMION: Mortal loved by Selene.

ENYO: See Graeae.

EOS (AURORA): Goddess of dawn.

EPIMETHEUS: Brother of Prometheus; husband of Pandora.

ERATO: See Muses.

EREBUS: Spirit of darkness; son of Chaos.

ERINYES: See Furies.

ERIS: Goddess of discord.

EROS (AMOR or CUPID): God of love; son of Aphrodite.

ETEOCLES: Son of Oedipus, whom he succeeded to rule alternately with Polynices; refused to give up throne at end of year; he and Polynices slew each other.

EUMENIDES: See Furies.

EUPHROSINE: See Graces.

EUROPA: Mortal loved by Zeus, who, in form of white bull, carried her off to Crete.

EURUS: See Winds.

EURYALE: See Gorgons.

EURYDICE: Nymph; wife of Orpheus.

EURYSTHEUS: King of Argos; imposed twelve labors on Hercules.

EUTERPE: See Muses.

FATES: Goddesses of destiny: Clotho (Spinner of thread of life), Lachesis (Determiner of length), and Atropos (Cutter of thread); also called Moirae. Identified by Romans with their goddesses of fate; Nona, Decuma, and Morta; called Parcae.

FAUNS: Roman deities of woods and groves.

FAUNUS: See Pan.

FAVONIUS: See Winds.

FLORA: Roman goddess of flowers.

FORTUNA: Roman goddess of fortune.

FURIES: Avenging spirits: Alecto, Megaera, and Tisiphone; known also as Erinyes or Eumenides.

GAEA: Goddess of earth; daughter of Chaos; mother of Titans; known also as Ge, Gaia, etc.

GALATEA: Statue of maiden carved from ivory by Pygmalion; given life by Aphrodite.

GALATEA: Sea nymph; loved by Polyphemus.

GANYMEDE: Beautiful boy; successor to Hebe as cupbearer of gods.

GLAUCUS: Mortal who became sea divinity by eating magic grass.

GLAUKE: See Creusa.

GOLDEN FLEECE: Fleece from ram that flew Phrixos to Colchis; Aeëtes placed it under guard of dragon; carried off by Jason.

GORGONS: Female monsters: Euryale, Medusa, and Stheno; had snakes for hair; their glances turned mortals to stone. See Medusa.

GRACES: Beautiful goddesses: Aglaia (Brilliance), Euphrosyne (Joy), and Thalia (Bloom); daughters of Zeus.

GRAEAE: Sentinels for Gorgons: Deino, Enyo, and Pephredo; had one eye among them, which passed from one to another.

HADES (DIS): Name sometimes given Pluto; also, abode of dead, ruled by Pluto.

HAEMON: Son of Creon; promised husband of Antigone; killed himself in her tomb.

HAMADRYADS: Tree nymphs; lived and died with trees they inhabited.

HARPIES: Monsters with heads of women and bodies of birds.

HEBE (JUVENTAS): Goddess of youth; cupbearer of gods before Ganymede; daughter of Zeus and Hera.

HECATE: Goddess of sorcery and witchcraft.

HECTOR: Son of Priam; slayer of Patroclus; slain by Achilles.

HECUBA: Wife of Priam.

HELEN: Fairest woman in world; daughter of Zeus and Leda; wife of Menelaus; carried to Troy by Paris, causing Trojan War.

HELIADES: Daughters of Helios; mourned for Phaëthon and were changed to poplar trees.

HELIOS (SOL): God of sun; later identified with Phoebus Apollo.

HELLE: Sister of Phrixos; fell from ram of Golden Fleece; water where she fell named Hellespont.

HEPHAESTUS (VULCAN): God of fire; celestial blacksmith; son of Zeus and Hera; husband of Aphrodite.

HERA (JUNO): Queen of heaven; wife of Zeus.

HERCULES: Hero and strong man; son of Zeus and Alcmene; performed twelve

labors or deeds to be free from bondage under Eurystheus; after death, his mortal share was destroyed, and he became immortal. Also known as Herakles or Hercules. Labors: (1) killing Nemean lion; (2) killing Lernaean Hydra; (3) capturing Erymanthian boar; (4) capturing Cerynean hind; (5) killing man-eating Stymphalian birds; (6) procuring girdle of Hippolyte; (7) cleaning Augean stables; (8) capturing Cretan bull; (9) capturing man-eating horses of Diomedes; (10) capturing cattle of Geryon; (11) procuring golden apples of Hesperides; (12) bringing Cerberus up from Hades.

HERMES (MERCURY): God of physicians and thieves; messenger of gods; son of Zeus and Mala.

HERO: Priestess of Aphrodite; Leander swam Hellespont nightly to see her; drowned herself at his death.

HESPERUS: Evening star.

HESTIA (VESTA): Goddess of hearth; sister of Zeus.

HIPPOLYTE: Queen of Amazons; wife of Theseus.

HIPPOLYTUS: Son of Theseus and Hippolyte; falsely accused by Phaedra of trying to kidnap her; slain by Poseidon at request of Theseus.

HIPPOMENES: Husband of Atalanta, whom he beat in foot race by dropping golden apples, which she stopped to pick up.

HYACINTHUS: Beautiful youth accidentally killed by Apollo, who caused flower to spring up from his blood.

HYDRA: Nine-headed monster in marsh of Lerna; slain by Hercules.

HYGEIA: Personification of health.

HYMEN: God of marriage.

HYPERION: Titan; early sun god; father of Helios.

HYPERMNESTRA: Daughter of Danaüs; refused to kill her husband Lynceus.

HYPNOS (SOMNUS): God of sleep.

IAPETUS: Titan; father of Atlas, Epimetheus, and Prometheus.

ICARUS: Son of Daedalus; flew too near sun with wax-attached wings and fell into sea and was drowned.

IO: Mortal maiden loved by Zeus; changed by Hera into heifer.

IOBATES: King of Lycia; sent Bellerophon to slay Chimera.

IPHIGENIA: Daughter of Agamemnon; offered as sacrifice to Artemis at Aulis; carried by Artemis to Tauris where she became priestess; escaped from there with Orestes.

IRIS: Goddess of rainbow; messenger of Zeus and Hera.

ISMENE: Daughter of Oedipus; sister of Antigone.

IULUS: Son of Aeneas.

IXION: King of Lapithae; for making love to Hera he was bound to endlessly revolving wheel in Tartarus.

JANUS: Roman god of gates and doors; represented with two opposite faces.

JASON: Son of Aeson; to gain throne of Iolus from Pelias, went to Colchis and brought back Golden Fleece; married Medea; deserted her for Creüsa.

JOCASTA: Wife of Laius; mother of Oedipus; unwittingly became wife of Oedipus; hanged herself when relationship was discovered.

JUNO: See Hera.

JUPITER: See Zeus.

JUVENTAS: See Hebe.

LACHESIS: See Fates.

LAIUS: Father of Oedipus, by whom he was slain.

LAOCOÖN: Priest of Apollo at Troy; warned against bringing wooden horse into Troy; destroyed with his two sons by serpents sent by Athena.

LARES: Roman ancestral spirits protecting descendants and homes.

LAVINIA: wife of Aeneas after defeat of Turnus.

LEANDER: Swam Hellespont nightly to see Hero; drowned in storm.

LEDA: Mortal loved by Zeus in form of Swan; mother of Helen, Clytemnestra, Dioscuri.

LETHE: See Rivers.

LETO (LATONA): Mother by Zeus of Artemis and Apollo.

LUCINA: Roman goddess of childbirth; identified with Juno.

LYNCEUS: Son of Aegyptus; husband of Hypermnestra; slew Danaüs.

MAIA: Daughter of Atlas; mother of Hermes.

MAIA: See Pleiades.

MANES: Souls of dead Romans, particularly of ancestors.

MARS: See Ares.

MARSYAS: Shepherd; challenged Apollo to music contest and lost; flayed alive by Apollo.

MEDEA: Sorceress; daughter of Aeëtes; helped Jason obtain Golden Fleece; when deserted by him for Creüsa, killed her children and Creüsa.

MEDUSA: Gorgon; slain by Perseus, who cut off her head.

MEGAERA: See Furies.

MELEAGER: Son of Althaea; his life would last as long as brand burning at his birth; Althaea quenched and saved it but destroyed it when Meleager slew his uncles.

MELPOMENE: See Muses.

MEMNON: Ethiopian king; made immortal by Zeus; son of Tithonus and Eos.

MENELAUS: King of Sparta; son of Atreus; brother of Menelaus; husband of Helen.

MERCURY: *See* Hermes.

MEZEPE: *See* Pleiades.

MEZENTIUS: Cruel Etruscan king; ally of Turnus against Aeneas; slain by Aeneas.

MIDAS: King of Phrygia; given gift of turning to gold all he touched.

MINERVA: *See* Athena.

MINOS: King of Crete; after death, one of three judges of dead in Hades; son of Zeus and Europa.

MINOTAUR: Monster, half man and half beast, kept in Labyrinth in Crete; slain by Theseus.

MNEMOSYNE: Goddess of memory; mother by Zeus of Muses.

MOIRAE: *See* Fates.

MOMUS: God of ridicule.

MORPHEUS: God of dreams.

MORS: *See* Thanatos.

MORTA: *See* Fates.

MUSES: Goddesses presiding over arts and sciences: Calliope (epic poetry), Clio (history), Erato (lyric and love poetry), Euterpe (music), Melpomene (tragedy), Polymnia or Polyhymnia (sacred poetry), Terpsichore (choral dance and song), Thalia (comedy and bucolic poetry), Urania (astronomy); daughters of Zeus and Mnemosyne.

NAIADS: Nymphs of waters, streams, and fountains.

NAPAEAE: Wood nymphs.

NARCISSUS: Beautiful youth loved by Echo; in punishment for not returning her love, he was made to fall in love with his image reflected in pool; pined away and became flower.

NEMESIS: Goddess of retribution.

NEOPTOLEMUS: Son of Achilles; slew Priam; also known as Pyrrhus.

NEPTUNE: *See* Poseidon.

NEREIDS: Sea nymphs; attendants on Poseidon.

NESTOR: King of Pylos; noted for wise counsel in expedition against Troy.

NIKE: Goddess of victory.

NIOBE: Daughter of Tantalus; wife of Amphin; her children slain by Apollo and Artemis; changed to stone but continued to weep her loss.

NONA: *See* Fates.

NOTUS: *See* Winds.

NOX: *See* Nyx.

NYMPHS: Beautiful maidens; inferior deities of nature.

NYX (NOX): Goddess of night.

OCEANIDS: Ocean nymphs; daughters of Oceanus.

OCEANUS: Eldest of Titans; god of waters.

ODYSSEUS (ULYSSES): King of Ithaca; husband of Penelope; wandered ten years after fall of Troy before arriving home.

OEDIPUS: King of Thebes; son of Laius and Jocasta; unwittingly murdered Laius and married Jocasta; tore his eyes out when relationship was discovered.

OENONE: Nymph of Mount Ida; wife of Paris, who abandoned her; refused to cure him when he was poisoned by arrow of Philoctetes at Troy.

OPS: *See* Rhea.

OREADS: Mountain nymphs.

ORESTES: Son of Agamemnon and Clytemnestra; brother of Electra; slew Cytemnestra and Aegisthus; pursued by Furies until his purification by Apollo.

ORION: Hunter; slain by Artemis and made heavenly constellation.

ORPHEUS: Famed musician; son of Apollo and Muse Calliope; husband of Eurydice.

PALES: Roman goddess of shepherds and herdsmen.

PALINURUS: Aeneas' pilot; fell overboard in his sleep and was drowned.

PAN (FAUNUS): God of woods and fields; part goat; son of Hermes.

PANDORA: Opener of box containing human ills; mortal wife of Epimetheus.

PARCAE: *See* Fates.

PARIS: Son of Priam; gave apple of discord to Aphrodite, for which she enabled him to carry off Helen; slew Achilles at Troy; slain by Philoctetes.

PATROCLUS: Great friend of Achilles; wore Achilles' armor and was slain by Hector.

PEGASUS: Winged horse that sprang from Medusa's body at her death; ridden by Bellerophon when he slew Chimera.

PELIAS: King of Ioclus; seized throne from his brother Aeson; sent Jason for Golden Fleece; slain unwittingly by his daughters at instigation of Medea.

PELOPS: Son of Tantalus; his father cooked and served him to gods; restored to life; Peloponnesus named for him.

PENATES: Roman household gods.

PENELOPE: Wife of Odysseus; waited faithfully for him for ten years while putting off numerous suitors.

PEPHREDO: *See* Graeae.

PERIPHETES: Giant; son of Hephaestus; slain by Theseus.

PERSEPHONE (PROSERPINE): Queen of infernal regions; daughter of Zeus and Demeter; wife of Pluto.

PERSEUS: Son of Zeus and Danaë; slew Medusa; rescued Andromeda from monster and married her.

PHAEDRA: Daughter of Minos; wife of Theseus; falsely accused Hippolytus of trying to kidnap her.

PHAETHON: Son of Helios; drove his father's sun chariot and was struck down by Zeus before he set world on fire.

PHILOCTETES: Greek warrior who possessed Hercules' bow and arrows; slew Paris at Troy with poisoned arrow.

PHINEUS: Betrothed of Andromeda; tried to slay Perseus but turned to stone by Medusa's head.

PHLEGETHON: *See* Rivers.

PHOSPHOR: Morning star.

PHRIXOS: Brother of Helle; carried by ram of Golden Fleece to Colchis.

PIRITHOÛS: Son of Ixion; friend of Theseus; tried to carry off Persephone from Hades; bound to enchanted rock by Pluto.

PLEIADES: Alcyone, Celaeno, Electra, Maia, Merope, Sterope or Asterope, Taygeta; seven daughters of Atlas; transformed into heavenly constellation, of which six stars are visible (Merope is said to have hidden in shame for loving a mortal).

PLUTO (DIS): God of Hades; brother of Zeus.

PLUTUS: God of wealth.

POLLUX: *See* Dioscuri.

POLYMNIA: *See* Muses.

POLYNICES: Son of Oedipus; he and his brother Eteocles killed each other; burial rite, forbidden by Creon, performed by his sister Antigone.

POLYPHEMUS: Cyclops; devoured six of Odysseus' men; blinded by Odysseus.

POLYXENA: Daughter of Priam; betrothed to Achilles, whom Paris slew at their betrothal; sacrificed to shade of Achilles.

POMONA: Roman goddess of fruits.

PONTUS: Sea god; son of Gaea.

POSEIDON (NEPTUNE): God of sea; brother of Zeus.

PRIAM: King of Troy; husband of Hecuba; ransomed Hector's body from Achilles; slain by Neoptolemus.

PRIAPUS: God of regeneration.

PROCRIUS: Wife of Cephalus, who accidentally slew her.

PROCRUSTES: Giant; stretched or cut off legs of victims to make them fit iron bed; slain by Theseus.

PROETUS: Husband of Anteia; sent Belerophon to Iobates to be put to death.

PROTEUS: Sea god; assumed various shapes when called on to prophesy.

PSYCHE: Beloved of Eros; punished by jealous Aphrodite; made immortal and united with Eros.

PYGMALION: King of Cyprus; carved ivory statue of maiden which Aphrodite gave life as Galatea.

PYRAMUS: Babylonian youth; made love to Thisbe through hole in wall; thinking Thisbe slain by lion, killed himself.

PYRRHUS: *See* Neoptolemus.

PYTHON: Serpent born from slime left by Deluge; slain by Apollo.

QUIRINUS: Roman war god.

REMUS: Brother of Romulus; slain by him.

RHADAMANTHUS: One of three judges of dead in Hades; son of Zeus and Europa.

RHEA (OPS): Daughter of Uranus and Gaea; wife of Cronus; mother of Zeus; identified with Cybele.

RIVERS OF UNDERWORLD: Acheron (woe), Cocytus (wailing), Lethe (forgetfulness); Phlegethon (fire), Styx (across which souls of dead were ferried by Charon).

ROMULUS: Founder of Rome; he and Remus suckled in infancy by she-wolf; slew Romulus; deified by Romans.

SARPEDON: King of Lycia; son of Zeus and Europa; slain by Patroclus at Troy.

SATURN: *See* Cronus.

SATYRS: Hoofed demigods of woods and fields; companions of Dionysus.

SCIRON: Robber; forced strangers to wash his feet, then hurled them into sea where tortoise devoured them; slain by Theseus.

SCYLLA: Female monster inhabiting rock opposite Charybdis; menaced passing sailors.

SELENE: Goddess of moon.

SEMELE: Daughter of Cadmus; mother by Zeus of Dionysus; demanded Zeus appear before her in all his splendor and was destroyed by his lightnings.

SIBYLS: Various prophetesses; most famous, Cumaean sibyl, accompanied Aeneas into Hades.

SILENI: Minor woodland deities similar to satyrs (singular: silenus). Sometimes Silenus refers to eldest of satyrs, son of Hermes or of Pan.

SILVANUS: Roman god of woods and fields.

SINIS: Giant; bent pines, by which he hurled victims against side of mountain; slain by Theseus.

SIRENS: Minor deities who lured sailors to destruction with their singing.

SISYPHUS: King of Corinth; condemned in Tartarus to roll huge stone to top of hill; it always rolled back down again.

SOL: *See* Helios.

SOMNUS: *See* Hypnos.

SPHINX: Monster of Thebes; killed those who could not answer her riddle*; slain by Oedipus. Name also refers to other monsters having body of lion, wings, and head and bust of woman.

STEROPE: *See* Pleiades.

STHENO: *See* Gorgons.

STYX: *See* Rivers.

*What animal goes on 4 feet in morning, 2 at noon, 3 at night? Answer: Man (crawls when child, walks when adult, uses staff when old).

SYMPLEGADES: Clashing rocks at entrance to Black Sea; Argo passed through, causing them to become forever fixed.

SYRINX: Nymph pursued by Pan; changed to reeds, from which he made his pipes.

TANTALUS: Cruel king; father of Pelops and Niobe; condemned in Tartarus to stand chin-deep in lake surrounded by fruit branches; as he tried to eat or drink, water or fruit always receded.

TARTARUS: Underworld below Hades; often refers to Hades.

TAYGETA: *See* Pleiades.

TELEMACHUS: Son of Odysseus; made unsuccessful journey to find his father.

TELLUS: Roman goddess of earth.

TERMINUS: Roman god of boundaries and landmarks.

TERPSICHOE: *See* Muses.

TERRA: Roman earth goddess.

THALIA: *See* Graces; Muses.

THANATOS (MORS): God of death.

THEMIS: Titan goddess of laws of physical phenomena; daughter of Uranus; mother of Prometheus.

THESEUS: Son of Aegeus; slew Minotaur; married and deserted Ariadne; later married Phaedra.

THISBE: Beloved of Pyramus; killed herself at his death.

THYESTES: Brother of Atreus; Atreus killed three of his sons and served them to him at banquet.

TIRESIAS: Blind soothsayer of Thebes.

TISIPHONE: *See* Furies.

TITANS: Early gods from which Olympian gods were derived; children of Uranus and Gaea.

TITHONUS: Mortal loved by Eos; changed into grasshopper.

TRITON: Demigod of sea; son of Poseidon.

TURNUS: King of Rutuli in Italy; betrothed to Lavinia; slain by Aeneas.

ULYSSES: *See* Odysseus.

URANIA: *See* Muses.

URANUS: Personification of Heaven; husband of Gaea; father of Titans; de-throned by his son Cronus.

VENUS: *See* Aphrodite.

VERTUMNUS: Roman god of fruits and vegetables; husband of Pomona.

VESTA: *See* Hestia.

VULCAN: *See* Hephaestus.

WINDS: Aeolus (keeper of winds), Bo-reas (Aquilo) (north wind), Eurus (east wind), Notus (Auster) (south wind), Zephyrus (Favonius) (west wind).

ZEPHYRUS: *See* Winds.

ZEUS (JUPITER): Chief of Olympian gods; son of Cronus and Rhea; husband of Hera.

Norse Mythology

AESIR: Chief gods of Asgard.

ANDVARI: Dwarf; robbed of gold and magic ring by Loki.

ANGERBOTH (Angrbotha): Giantess; mother by Loki of Fenrir, Hel, and Midgard serpent.

ASGARD (Asgarth): Abode of gods.

ASK (Aske, Askr): First man; created by Odin, Hoenir, and Lothur.

ASYNJUR: Goddesses of Asgard.

ATLI: Second husband of Gudrun; invited Gunnar and Hogni to his court, where they were slain; slain by Gudrun.

AUDHUMLA (Audhumbla): Cow that nourished Ymir; created Buri by licking ice cliff.

BALDER (Baldr, Baldur): God of light, spring, peace, joy; son of Odin; slain by Hoth at instigation of Loki.

BIFROST: Rainbow bridge connecting Midgard and Asgard.

BRAGI (Brage): God of poetry; husband of Ithunn.

BRANSTOCK: Great oak in hall of Vol-sungs; into it, Odin thrust Gram, which only Sigmund could draw forth.

BRYNHILD: Valkyrie; awakened from magic sleep by Sigurd; married Gunnar;

instigated death of Sigurd; killed herself and was burned on pyre beside Sigurd.

BUR (Bor): Son of Buri; father of Odin, Hoenir, and Lothur.

BURI (Bor): Progenitor of gods; father of Bur; created by Audhumla.

EMBLA: First woman; created by Odin, Hoenir, and Lothur.

FAFNIR: Son of Rodmar, whom he slew for gold in Otter's skin; in form of dragon, guarded gold; slain by Sigurd.

FENRIR: Wolf; offspring of Loki; swallows Odin at Ragnarok and is slain by Vitharr.

FORSETI: Son of Balder.

FREY (Freyr): God of fertility and crops; son of Njorth; originally one of Vanir.

FREYA (Freyja): Goddess of love and beauty; sister of Frey; originally one of Vanir.

FRIGG (Frigga): Goddess of sky; wife of Odin.

GARM: Watchdog of Hel; slays, and is slain by, Tyr at Ragnarok.

GIMLE: Home of blessed after Ragnarok.

GIUKI: King of Nibelungs; father of Gunnar, Hogni, Guttorm, and Gudrun.

GLATHSHEIM (Gladshelm): Hall of gods in Asgard.

GRAM (meaning "Angry"): Sigmund's sword; rewelded by Regin; used by Sigurd to slay Fafnir.

GREYFELL: Sigmund's horse; descended from Sleipnir.

GRIMHILD: Mother of Gudrun; administered magic potion to Sigurd which made him forget Brynhild.

GUDRUN: Daughter of Giuki; wife of Sigurd; later wife of Atli and Jonakr.

GUNNAR: Son of Giuki; in his semblance Sigurd won Brynhild for him; slain at hall of Atli.

GUTTORM: Son of Giuki; slew Sigurd at Brynhild's request.

HEIMDALL (Heimdallr): Guardian of Asgard.

HEL: Goddess of dead and queen of underworld; daughter of Loki.

HIORDIS: Wife of Sigmund; mother of Sigurd.

HOENIR: One of creators of Ask and Embla; son of Bur.

HOGNI: Son of Giuki; slain at hall of Atli.

HOTH (Hoder, Hodur): Blind god of night and darkness; slayer of Balder at instigation of Loki.

ITHUNN (Ithun, Iduna): Keeper of golden apples of youth; wife of Bragi.

JONAKR: Third husband of Gudrun.

JORMUNREK: Slayer of Swanhild; slain by sons of Gudrun.

JOTUNNHEIM (Jotunheim): Abode of giants.

LIF and **LIFTHRASIR**: First man and woman after Ragnarok.

LOKI: God of evil and mischief; instigator of Balder's death.

LOTHUR (Lodur): One of creators of Ask and Embla.

MIDGARD (Midgarth): Abode of mankind; the earth.

MIDGARD SERPENT: Sea monster; offspring of Loki; slays, and is slain by, Thor at Ragnarok.

MIMIR: Giant; guardian of well in Jotunnheim at root of Yggdrasill; knower of past and future.

MJOLLNIR: Magic hammer of Thor.

NAGLFAR: Ship to be used by giants in attacking Asgard at Ragnarok; built from nails of dead men.

NANNA: Wife of Balder.

NIBELUNGS: Dwellers in northern kingdom ruled by Giuki.

NIFLHEIM (Nifelheim): Outer region of cold and darkness; abode of Hel.

NJORTH: Father of Frey and Freya; originally one of Vanir.

NORNS: Demigoddesses of fate: Urth (Urdur) (Past), Verthandi (Verdandi) (Present), Skuld (Future).

ODIN (Othin): Head of Aesir; creator of world with Vili and Ve; equivalent to Woden (Wodan, Wotan) in Teutonic mythology.

OTTER: Son of Rodmar; slain by Loki; his skin filled with gold hoard of Andvari to appease Rodmar.

RAGNAROK: Final destruction of present world in battle between gods and giants; some minor gods will survive, and Lif and Lifthrasir will repeople world; known in Germany as Götterdämmerung, "Twilight of the Gods."

REGIN: Blacksmith; son of Rodmar; foster-father of Sigurd.

RERIR: King of Huns; son of Sigi.

RODMAR: Father of Regin, Otter, and Fafnir; demanded Otter's skin be filled with gold; slain by Fafnir, who stole gold.

SIF: Wife of Thor.

SIGGEIR: King of Goths; husband of Signy; he and his sons slew Volsung and his sons, except Sigmund; slain by Sigmund and Sinfliotli.

SIGI: King of Huns; son of Odin.

SIGMUND: Son of Volsung; brother of Signy, who bore him Sinfliotli; husband of Hiordis, who bore him Sigurd.

SIGNY: Daughter of Volsung; sister of Sigmund; wife of Siggeir; mother by Sigmund of Sinfliotli.

SIGURD: Son of Sigmund and Hiordis; wakened Brynhild from magic sleep; married Gudrun; slain by Guttorm at instigation of Brynhild.

SIGYN: Wife of Loki.

SINFIOTLI: Son of Sigmund and Signy.

SKULD: See Norns.

SLEIPNIR (Sleipner): Eight-legged horse of Odin.

SURT (Surtr): Fire demon; slays Frey at Ragnarok.

SVARTALFAHEIM: Abode of dwarfs.

SWANHILD: Daughter of Sigurd and Gudrun; slain by Jormunrek.

THOR: God of thunder; oldest son of Odin; equivalent to Germanic deity Donar.

TYR: God of war; son of Odin; equivalent to Tiu in Teutonic mythology.

ULL (Ullr): Son of Sif; stepson of Thor.

URTH: See Norns.

VALHALLA (Valhall): Great hall in Asgard where Odin received souls of heroes killed in battle.

VALI: Son of Odin; survivor of Ragnarok.

VALKYRIES: Virgins, messengers of Odin, who selected heroes to die in battle and took them to Valhalla; generally considered as nine in number.

VANIR: Early race of gods; three survivors, Njorth, Frey, and Freya, are associated with Aesir.

VE: Brother of Odin; one of creators of world.

VERTHANDI: See Norns.

VILI: Brother of Odin; one of creators of world.

VINGOLF: Abode of goddesses in Asgard.

VITHARR (Vithar): Son of Odin; survivor of Ragnarok.

VOLSUNG: King of Huns; son of Rerir; father of Signy, Sigmund, etc.; his descendants were called Volsungs.

YGGDRASIL: Giant ash tree springing from body of Ymir and supporting universe; its roots extended to Asgard, Jotunnheim, and Nifheim.

YMR (Ymer): Primeval frost giant killed by Odin, Vili, and Ve; world created from his body; also, from his body sprang Yggdrasil.

Egyptian Mythology

AARU: Abode of the blessed dead.

AMEN (Amon, Ammon): One of chief Theban deities; united with sun god under form of Amen-Ra.

AMENTI: Region of dead where souls were judged by Osiris.

ANUBIS: Guide of souls to Amenti; son of Osiris; jackal-headed.

APIS: Sacred bull, an embodiment of Ptah; identified with Osiris as Osiris-Apis or Serapis.

GEB (Keb, Seb): Earth god; father of Osiris; represented with goose on head.

HATHOR (Athor): Goddess of love and mirth; cow-headed.

HORUS: God of day; son of Osiris and Isis; hawk-headed.

ISIS: Goddess of motherhood and fertility; sister and wife of Osiris; sometimes shown as cow-headed.

KHEPERA: God of morning sun; represented by beetle.

KHNEMU (Khnum, Chnuphis, Chnemu, Chnum): Ram-headed god.

KHONSU (Khensu, Khuns): Son of Amen and Mut.

MENTU (Ment): Solar deity, sometimes considered god of war; falcon-headed.

MIN (Khem, Chem): Principle of physical life.

MUT (Maut): Wife of Amen.

NEPHTHYS: Goddess of the dead; sister and wife of Set.

NU: Chaos from which world was created, personified as a god.

NUT: Goddess of heavens; consort of Geb.

OSIRIS: God of underworld and judge of dead; son of Geb and Nut.

PTAH (Phtha): Chief deity of Memphis; father of gods and men.

RA: God of the Sun, the supreme god; son of Nut; Pharaohs claimed descent from him; represented as lion, cat, or falcon.

SERAPIS: God uniting attributes of Osiris and Apis.

SET (Seth): God of darkness or evil; brother and enemy of Osiris.

SHU: Solar deity; son of Ra and Hathor.

TEM (Atmu, Atum, Tum): Solar deity representing setting sun.

THOTH (Dhouti): God of wisdom and magic; scribe of gods; ibis-headed.

Opera and Operetta Composers

(The operas listed with each composer are not necessarily the only ones which he composed. Rather, they are those which remain best-known today—either because of occasional or frequent performances, or because of the popularity of overtures, arias, etc. The year and location after each opera are those of the first official performance.)

Auber, Daniel François (1782-1871): *Fra Diavolo* (1830, Paris).

Balfe, Michael (1808-1870): *The Bohemian Girl* (1843, London).

Beethoven, Ludwig van (1770-1827): *Fidelio* (1805, Vienna).

Bellini, Vincenzo (1801-1835): *La Sonnambula* (1831, Milan); *Norma* (1831, Milan); *I Puritani* (1835, Paris).

Berg, Alban (1885-1935): *Lulu* (1924, Berlin); *Wozzeck* (1937, Zürich).

Berlioz, Hector (1803-1869): *Benvenuto Cellini* (1838, Paris); *The Damnation of Faust* (1846, Paris); *Beatrice and Benedict* (1862, Baden-Baden); *Les Troyens* (*).

Blzet, Georges (1838-1875): *The Pearl Fishers* (1863, Paris); *Carmen* (1875, Paris).

Blitzstein, Marc (1905-): *The Cradle Will Rock* (1937, New York); *Regina* (1949, New York).

Boito, Arrigo (1842-1918): *Mefistofele* (1868, Milan).

Borodin, Alexander (1834-1887): *Prince Igor* (1890, Petrograd).

Britten, Benjamin (1913-): *Paul Bunyan* (1941, New York); *Peter Grimes* (1945, London); *The Rape of Lucrece* (1946, Glyndebourne, Eng.).

Charpentier, Gustave (1860-): *Louise* (1900, Paris).

Coward, Noel (1899-): *Bitter Sweet* (1929, London).

* Originally written as one opera but divided by Berlioz into two parts: *La Prise de Troie* and *Les Troyens à Carthage*. The second part was first performed in 1863 in Paris. The work as a whole was first performed in 1890 in Karlsruhe.

Damrosch, Walter (1862-): The Scarlet Letter (1896, Boston); The Man Without a Country (1937, New York).

Debussy, Claude (1862-1918): Pelléas et Mélisande (1902, Paris).

De Koven, Reginald (1859-1920): Robin Hood (1890, Chicago).

Delibes, Léo (1836-1891): Lakmé (1883, Paris).

Donizetti, Gaetano (1797-1848): L'Elisir d'Amore (1832, Milan); Lucia di Lammermoor (1835, Naples); The Daughter of the Regiment (1840, Paris); Don Pasquale (1843, Paris).

Falla, Manuel de (1876-1946): La Vida Breve (1913, Nice).

Flotow, Friedrich von (1812-1883): Martha (1847, Vienna).

Friml, Rudolf (1884-): The Firefly (1912, Syracuse, N. Y.); Katinka (1915, New York); Rose Marie (1924, New York); The Vagabond King (1925, New York).

Gershwin, George (1898-1937): Porgy and Bess (1935, New York).

Giordano, Umberto (1867-1948): Andrea Chénier (1896, Milan); Madame Sans-Gêne (1915, New York).

Glinka, Mikhail (1803-1857): A Life for the Tsar (1836, Petrograd); Russlan and Ludmilla (1842, Petrograd).

Glück, Christoph Willibald (1714-1787): Orfeo ed Euridice (1762, Vienna); Iphigenia in Aulis (1777, Paris); Iphigenia in Tauris (1779, Paris).

Goldmark, Karl (1830-1915): The Queen of Sheba (1875, Vienna).

Gounod, Charles François (1818-1893): Faust (1859, Paris); Romeo and Juliet (1867, Paris).

Halévy, Jacques François (1799-1862): La Juive (1835, Paris).

Herbert, Victor (1859-1924): The Fortune Teller (1898, New York); Babes in Toyland (1903, Chicago); Mile. Modiste (1905, New York); The Red Mill (1906, New York); Naughty Marietta (1910, New York); Natoma (1911, Philadelphia); Sweethearts (1913, Baltimore); The Princess Pat (1915, New York); Eileen (1917, New York).

Herold, Louis J. F. (1791-1833): Zampa (1831, Paris).

Humperdinck, Engelbert (1854-1921): Hansel and Gretel (1893, Weimar).

Kodály, Zoltán (1882-): Háry János (1926, Budapest).

Krenek, Ernst (1900-): Jonny Spielt Auf (1927, Leipzig).

Lehár, Franz (1870-1948): The Merry Widow (1907, London); The Count of Luxembourg (1909, Vienna); Gypsy Love (1911, New York).

Leoncavallo, Ruggero (1858-1919): I Pagliacci (1892, Milan).

Mascagni, Pietro (1863-1945): Cavalleria Rusticana (1890, Rome); L'Amico Fritz (1891, Rome).

Massenet, Jules (1842-1912): Hérodiade (1881, Brussels); Manon (1884, Paris); Thais (1894, Paris).

Menotti, Gian-Carlo (1911-): Amelia Goes to the Ball (1937, Philadelphia); The Medium (1946, New York); The Telephone (1947, New York); The Consul (1950, New York).

Meyerbeer, Giacomo (1791-1864): Les Huguenots (1836, Paris); Le Prophète (1849, Paris); L'Africana (1865, Paris).

Montemezzi, Italo (1875-): L'Amore dei Tre Re (1913, Milan).

Mozart, Wolfgang Amadeus (1756-1791): Idomeneo (1781, Munich); The Abduction from the Seraglio (1782, Vienna); The Marriage of Figaro (1786, Vienna); Don Giovanni (1787, Prague); Così fan Tutti (1790, Vienna); The Magic Flute (1791, Vienna).

Musorgski, Modest (1835-1881): Boris Godunov (1874, Petrograd); Khovanshchina (1886, Petrograd).

Nicolai, Otto (1810-1849): The Merry Wives of Windsor (1849, Berlin).

Offenbach, Jacques (1819-1880): Orpheus in Hades (1858, Paris); The Tales of Hoffmann (1881, Paris).

Pepusch, John Christopher (1667-1752): The Beggar's Opera (1723, London).

Pergolesi, Giovanni Battista (1710-1736): La Serva Padrona (1733, Naples).

Planquette, Robert (1848-1903): The Chimes of Normandy (1877, Paris).

Ponchielli, Amilcare (1834-1886): La Gioconda (1876, Milan).

Prokofieff, Serge (1891-): The Love for Three Oranges (1921, Chicago).

Puccini, Giacomo (1858-1924): Manon Lescaut (1893, Turin); La Bohème (1896, Turin); Tosca (1900, Rome); Madame Butterfly (1904, Milan); Girl of the Golden West (1910, New York); Turandot (1926, Milan).

Purcell, Henry (1659-1695): Dido and Aeneas (1689, Chelsea, Eng.).

Ravel, Maurice (1875-1937): L'Heure Espagnole (1911, Paris); L'Enfant et les Sortilèges (1925, Monte Carlo).

Rimski-Korsakov, Nikolai (1844-1908): The Snow Maiden (1882, Petrograd); Sadko (1897, Moscow); Le Coq d'Or (1909, Moscow).

Romberg, Sigmund (1887-): Maytime (1917, New York); Blossom Time (1921, New York); The Student Prince (1924, New York); The Desert Song (1926, New York); The New Moon (1928, New York).

Rossini, Gioacchino (1792-1868): The Barber of Seville (1816, Rome); Semira-

uide (1823, Venice); William Tell (1829, Paris).

Saint-Saëns, Camille (1835-1920): Samson et Dalila (1877, Weimar).

Smetana, Bedřich (1824-1884): The Bartered Bride (1866, Prague).

Strauss, Oskar (1870-): The Chocolate Soldier (1908, Vienna).

Strauss, Johann (1825-1899): Die Fledermaus (1874, Vienna); The Gypsy Baron (1885, Vienna).

Strauss, Richard (1864-1949): Salome (1905, Dresden); Elektra (1909, Dresden); Der Rosenkavalier (1911, Dresden); Ariadne auf Naxos (1912, Zürich).

Stravinsky, Igor (1882-): The Nightingale (1914, Paris).

Sullivan, Sir Arthur (1842-1900): Trial by Jury (1875, London); The Sorcerer (1877, London); H.M.S. Pinafore (1878, London); The Pirates of Penzance (1879, New York); Patience (1881, London); Iolanthe (1882, London); Princess Ida (1884, London); The Mikado (1885, London); Ruddigore (1887, London); The Yeoman of the Guard (1888, London); The Gondoliers (1889, London).

Suppé, Franz von* (1819-1895): The Beautiful Galatea (1865, Vienna); Light Cavalry (1866, Vienna).

Taylor, Deems (1885-): The King's Henchman (1927, New York); Peter Ibbetson (1931, New York).

Tchaikovsky, Peter Il'ich (1840-1893): Eugene Onegin (1879, Moscow); Joan of

*Suppé's popular *Poet and Peasant* overture was written for a play rather than for an operetta.

Arc (1881, Petrograd); Pique Dame (1890, Petrograd).

Thomas, Ambroise (1811-1896): Mignon (1866, Paris); Hamlet (1868, Paris).

Thomson, Virgil (1896-): Four Saints in Three Acts (1934, Hartford, Conn.).

Verdi, Giuseppe (1813-1901): Ernani (1844, Venice); Rigoletto (1851, Venice); Il Trovatore (1853, Rome); La Traviata (1853, Venice); Simon Boccanegra (1857, Venice); A Masked Ball (1859, Rome); La Forza del Destino (1862, Petrograd); Don Carlos (1867, Paris); Aida (1871, Cairo); Otello (1887, Milan); Falstaff (1893, Milan).

Wagner, Richard (1813-1883): Rienzi (1842, Dresden); The Flying Dutchman (1843, Dresden); Tannhäuser (1845, Dresden); Lohengrin (1850, Weimar); Tristan and Isolde (1865, Munich); Die Meistersinger (1868, Munich); Das Rheingold (1869, Munich); Die Walküre (1870, Munich); Siegfried (1876, Bayreuth); Götterdämmerung (1876, Bayreuth); Parsifal (1882, Bayreuth).

Weber, Karl Maria von (1786-1826): Der Freischütz (1821, Berlin); Euryanthe (1823, Vienna); Oberon (1826, London).

Weill, Kurt (1900-1950): Die Dreigroschenoper (1928, Berlin); Street Scene (1947, New York); Down in the Valley (1948, Bloomington, Ind.); Lost in the Stars (1949, New York).

Wolf-Ferrari, Ermanno (1876-1948): The Secret of Suzanne (1909, Munich); The Jewels of the Madonna (1911, Berlin).

Derivations of the Names of the Months

January: From *Janus*, the two-faced Roman god who looked both into the future and the past.

February: From *februa*, Roman feast of purification held on the 15th of this month.

March: From *Mars*, the Roman god of war.

April: Derivation uncertain. Perhaps from the Latin word *aperire* (to open) in regard to the opening of trees and flowers.

May: Derivation uncertain. Perhaps from the Roman goddess *Maia*, or from the Latin word *maius* (great), which was applied to Jupiter. Also may derive from the Latin word *maiores*, as being dedicated to age.

June: Derivation uncertain. Perhaps

from the Roman goddess *Juno*, or from the Latin word *iuniores*, as being dedicated to youth. Also may derive from the consulate *Junius Brutus*.

July: From *Julius Caesar*. Originally called *Quintilis*.

August: From the Emperor *Augustus* of Rome. Originally called *Sextilis*.

September: From *septem*, the Latin word for seven. The Roman year originally had only ten months, beginning with March. January and February were later added.

October: From *octo*, the Latin word for eight.

November: From *novem*, the Latin word for nine.

December: From *decem*, the Latin word for ten.

Names of the Days

Sunday: From the *Sun*.

Monday: From the *Moon*.

Tuesday: From *Tyr*, the Norse god of war.

Wednesday: From *Woden*, the highest Anglo-Saxon god.

Thursday: From *Thor*, the Norse god of thunder.

Friday: From *Friga*, the wife of Woden.

Saturday: From the planet *Saturn*.

NOTE: In ancient Rome, each day was named for the planet ruling its first hour. The Anglo-Saxons retained three of these derivations (Sunday, Monday, Saturday) but substituted their own gods in naming the other four days.

AMERICAN ECONOMY



ESSENTIAL FACTS *about* BUSINESS • AGRICULTURE

LABOR • SOCIAL SECURITY • TAXES • WORLD TRADE

by

THE RESEARCH INSTITUTE of AMERICA, Inc.

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ECONOMICS IS MORE THAN THE favorite pastime of a handful of college professors and government officials. It is the sum total of the plants and facilities which help make the goods we buy and use; it includes the service establishment, wholesale house and the corner grocer which help bring the goods and services closer to the ultimate customer. And finally, it includes all of us, 150 million Americans who help the American economy produce and at the same time, as consumers, share its products.

This portion of the *Information Please Almanac* presents essential facts about this economy of ours, what it consists of and how its components work together to turn out the highest standard of living in the world. The statistical tables afford a view of where we stand and how we have come here; imagination must tell us to what new highs the steady progress will eventually carry us.

Our personal fortunes are inextricably tied to what happens in these economic areas. Useful as this section may be as a reference source to answer specific questions, it is intended to do more. Exploring it, page by page, should give the reader an understanding of what the American economy is and what makes it tick.

Statistical Section

Basic facts on American business (starting on the next page) gives a bird's-eye view of American production and income. It shows the relative importance of various industries and trades and the extent to which we have been able to combine rearmament with high civilian output.

What industry makes (starting at page 270) takes a closer look at our industrial output. It follows the steady rise in industrial production since Civil War days, the

changes which the war and postwar periods have brought about, and highlights the problems we face in starting a new rearmament effort a short five years after the end of the last world conflict.

What farmers produce (starting at page 276) proves that we are the leading nation in agricultural output as well as in the industrial field, and shows the reasons why.

What commerce distributes (starting at page 279) deals with the wholesale and retail channels through which industry's products flow to the final consumer.

What services contribute (starting at page 282) shows the important place which the hundreds of thousands of small service establishments play in providing us with daily conveniences, the importance of banking and stock exchanges to the financing of our economic effort, and the growing part which advertising plays in bringing buyer and seller together.

What government does and costs (starting at page 286) contains some vital facts on the ever-growing role of government in our everyday lives.

How we work (starting at page 289) deals with all of us: how we are employed, how long we work and what we accomplish.

What we earn and spend—what living costs us (starting at page 292) traces the steady rise in our incomes which is impressive indeed—even after allowing for the higher cost of living. It shows how prices rose to their high 1948 level, the first postwar decline, and the beginning of a new climb under the pressure of mounting military demand.

What we own (starting at page 300) and *what we owe* (starting at page 302) take inventory of the national assets and liabilities in which all of us share.

BASIC FACTS ON AMERICAN BUSINESS

A good measure of our economic health is the Gross National Product which shows the total expenditure by individuals, business and government for goods and services produced by the economy. It more than doubled during the recent war and, contrary to many expectations, even exceeded that unprecedented level in the early postwar years. Private investment and personal consumption quickly took up most of the slack created by the drop in government expenditures for war.

Our national income also continues at more than twice its size during the boom year of 1929. A drop in government payments and a smaller decline in manufacturing, which were inevitable after the end of the war, were largely made up by increases in wholesale and retail trades, services, agriculture, communications and public utilities.

These broad over-all figures obscure, of course, many individual differences. Billion dollar companies and other large concerns account for two-thirds of our output though there are 93 small businesses for every 7 large ones. The average income varies greatly between different states and finally our past history indicates a consistent pattern of ups and downs in our economic well being.

The year 1950 brought a sudden reversal. An economy already running in high gear suddenly was called upon to shoulder the added responsibility for a new rearmament effort. Contrary to 1939-41, there was little slack to take up in meeting the new military demand, and some curtailment of civilian production consumption seemed inevitable at an early stage of the new mobilization.

Gross National Product or Expenditure

(in millions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1933	1941	1945	1947	1948	1949	1950*
Gross national product.....	103,828	55,760	126,417	215,210	233,264	259,071	255,578	266,200
Personal consumption expenditures....	78,761	46,346	82,255	123,079	165,570	177,446	178,832	183,450
Durable goods.....	9,362	3,503	9,750	8,472	21,369	22,868	23,841	26,800
Nondurable goods.....	37,742	22,254	43,960	74,886	95,142	100,887	98,541	98,250
Services.....	31,657	20,589	28,545	39,721	49,059	53,691	56,450	58,400
Gross private domestic investment.....	15,824	1,306	18,334	10,733	30,187	43,124	33,028	43,200
New construction.....	7,824	1,142	6,784	3,934	13,904	17,716	17,268	20,400
Producers' durable equipment.....	6,438	1,783	7,676	7,545	17,080	19,893	19,473	20,450
Change in business inventories.....	1,562	-1,619	3,874	-746	-797	5,515	-3,713	2,350
Net foreign investment.....	771	150	1,124	-1,438	8,895	1,923	422	-1,950
Government purchases.....	8,472	7,958	24,704	82,836	28,612	36,578	43,296	41,400
Federal.....	1,311	2,018	16,923	74,976	15,784	20,990	25,339	22,800
War.....	1,344	2,022	13,794	75,923	17,079	21,521	25,740	.....
Nonwar.....			3,173	1,031				
Less: Government sales.....	33	4	44	2,158	1,295	531	401	250
State and local.....	7,161	5,940	7,781	8,040	12,828	15,588	17,957	18,850

* First half at annual rate, seasonally adjusted.

National Income by Industrial Origin

(in millions of dollars)

Source: U. S. Department of Commerce.

Industry	1929	1933	1941	1944	1946	1947	1948	1949	1949 % of total
All industries, total.....	87,355	39,584	103,834	183,838	180,286	198,688	223,466	216,831	100.00
Agriculture, forestry, and fisheries.....	8,002	3,521	8,880	14,830	18,251	19,424	21,825	17,388	8.02
Farms.....	7,791	3,402	8,655	14,486	17,821	18,949	21,307	16,897	7.79
Agricultural and similar service establishments.....	119	87	148	221	249	298	314	308	.14
Forestry.....	26	11	14	31	48	50	56	53	.03
Fisheries.....	66	21	63	92	133	127	148	130	.06
Mining.....	2,097	662	2,341	2,950	3,071	4,350	5,277	4,441	2.05
Metal mining.....	478	41	513	417	324	557	612	539	.25
Anthracite mining.....	285	130	165	238	286	302	340	265	.12
Bituminous and other soft coal.....	652	255	809	1,271	1,241	1,827	2,136	1,582	.73
Crude petroleum and natural gas.....	486	195	654	800	925	1,293	1,769	1,612	.74
Nonmetallic mining.....	196	41	200	224	295	371	420	443	.21
Contract construction.....	3,691	735	4,370	4,375	6,651	8,550	10,458	10,431	4.81

Industry	1929	1933	1941	1944	1946	1947	1948	1949	1949 % of total
Manufacturing.....	22,012	7,563	32,897	60,456	48,905	59,459	67,272	62,870	29.00
Food and kindred products.....	2,157	1,335	2,683	4,992	5,573	5,822	6,459	6,409	2.96
Tobacco manufactures.....	258	142	215	289	332	370	461	491	.22
Textile-mill products.....	1,797	697	2,036	2,956	4,015	4,687	5,385	4,177	1.92
Apparel, other finished fabrics.....	1,240	532	1,429	2,598	3,242	3,342	3,472	3,299	1.52
Lumber and timber basic products.....	850	122	887	1,158	1,433	1,914	2,200	1,734	.80
Furniture and finished lumber.....	678	183	765	1,029	1,378	1,535	1,791	1,619	.75
Paper and allied products.....	563	290	1,034	1,352	1,709	2,234	2,389	2,188	1.01
Printing and publishing.....	1,580	790	1,359	2,045	2,724	3,073	3,177	3,275	1.51
Chemicals and allied products.....	1,136	690	1,941	3,399	3,337	3,846	4,609	4,618	2.13
Products of petroleum and coal.....	993	17	833	1,360	1,679	2,488	3,799	3,044	1.40
Rubber products.....	356	103	485	991	1,090	1,125	1,051	960	.44
Leather and leather products.....	601	270	614	865	1,071	1,113	1,242	1,105	.51
Stone, clay and glass products.....	799	208	1,072	1,137	1,561	1,851	2,120	2,055	.95
Iron and steel products.....	2,978	682	5,048	9,081	5,588	7,647	8,720	7,789	3.59
Nonferrous metals and products.....	767	155	1,201	1,942	1,748	1,934	2,120	1,974	.91
Machinery (except electrical).....	1,903	426	3,850	6,000	4,829	6,324	6,999	6,222	2.87
Electrical machinery.....	1,048	276	1,915	3,732	2,391	3,432	3,551	3,384	1.56
Transportation equipment, except autos.....	317	69	2,276	12,494	1,703	1,548	1,789	1,822	.84
Automobiles and auto equipment.....	1,394	384	2,364	1,413	1,920	3,557	4,164	4,942	2.28
Miscellaneous.....	597	192	890	1,623	1,582	1,617	1,774	1,793	.83
Wholesale and retail trade.....	13,099	5,375	15,903	25,137	34,137	37,324	42,870	42,665	19.68
Wholesale trade.....	3,955	1,631	4,795	6,995	9,512	10,850	13,021	12,691	5.85
Retail trade and auto services.....	9,135	3,744	11,127	18,142	24,625	26,474	29,849	29,974	13.83
Finance, insurance and real estate.....	13,098	5,681	9,583	13,088	14,696	15,666	17,172	17,678	8.15
Banking.....	1,960	493	1,028	1,667	2,200	2,180	2,376	2,540	1.17
Security and commodity brokers, dealers and exchanges.....	644	256	91	215	281	173	248	216	.10
Finance, n.e.c.....	195	—9	206	271	341	414	459	483	.22
Insurance carriers.....	788	514	843	1,022	1,083	1,281	1,482	1,657	.76
Insurance agents and combination offices.....	533	367	553	692	968	1,094	1,221	1,256	.58
Real estate.....	8,978	4,060	6,748	9,221	9,823	10,524	11,386	11,526	5.32
Transportation.....	6,562	2,958	6,180	11,197	10,182	11,481	12,751	11,994	5.53
Railroads.....	4,600	1,849	3,778	6,954	5,472	6,311	7,102	6,309	2.91
Local railways and bus lines.....	592	331	329	571	601	599	556	580	.27
Highway passenger transportation.....	231	118	251	676	785	773	799	750	.34
Highway freight transportation.....	482	356	906	1,305	1,683	1,946	2,306	2,370	1.09
Water transportation.....	267	153	437	858	828	876	888	846	.39
Air transportation (common carriers).....	—3	10	77	177	217	240	308	349	.16
Pipe-line transportation.....	130	47	145	147	128	152	186	189	.09
Services allied to transportation.....	263	94	266	509	478	584	606	601	.28
Communications and public utilities.....	2,878	2,000	3,313	4,100	4,850	5,157	5,942	6,601	3.04
Telephone and telegraph.....	1,130	692	1,135	1,676	1,987	2,085	2,501	2,719	1.25
Radio broadcasting.....	28	14	106	177	207	228	257	276	.13
Utilities: electric and gas.....	1,640	1,237	2,002	2,167	2,569	2,748	3,079	3,485	1.61
Local public services, n.e.c.....	80	57	70	80	87	96	105	121	.05
Services.....	10,168	5,447	9,709	13,268	16,614	18,345	19,823	20,461	9.44
Hotels and lodging places.....	577	193	520	914	1,180	1,177	1,226	1,222	.56
Personal services.....	1,220	667	1,320	1,931	2,452	2,555	2,637	2,595	1.20
Private households.....	3,117	1,177	2,076	2,220	2,591	3,070	3,369	3,621	1.67
Commercial and trade schools and employment agencies.....	49	15	62	147	112	144	172	195	.09
Business services, n.e.c.....	564	332	753	1,053	1,481	1,665	1,906	1,926	.89
Misc. repair services and hand trades.....	284	175	389	683	614	754	779	756	.35
Motion pictures.....	432	209	497	871	1,116	1,028	867	871	.40
Amusement and recreation, except motion pictures.....	371	152	338	453	721	712	742	741	.34
Medical and health services.....	1,522	937	1,587	2,315	2,900	3,363	3,747	3,957	1.82
Legal services.....	689	561	763	892	1,165	1,280	1,457	1,487	.69
Engineering, other professional, n.e.c.....	243	113	333	373	554	631	756	772	.36
Educational services, n.e.c.....	473	400	471	539	690	839	983	1,052	.49
Religious organizations.....	355	289	300	341	373	405	408	441	.20
Nonprofit organizations, n.e.c.....	272	227	300	536	665	722	774	825	.38
Government and government enterprises.....	5,114	5,349	10,479	34,211	22,647	18,529	19,629	21,838	10.07
Federal—general government.....	900	1,187	5,046	27,905	14,741	9,356	8,949	10,078	4.65
Federal—government enterprises.....	581	485	788	1,083	1,404	1,426	1,611	1,782	.82
State and local—general government.....	3,456	3,531	4,368	4,883	6,080	7,262	8,517	9,389	4.33
State and local—government enterprises.....	177	146	277	340	422	485	552	589	.27
Rest of the world.....	643	293	231	226	282	403	447	464	.21

Number of Firms in Operation by Industry and Size of Firm, March 31, 1948

(in thousands)

Source: U. S. Department of Commerce.

Industry	All size classes	Number of firms with employees numbering—							
		0-3	4-7	8-19	20-49	50-99	100-499	500-999	1,000 or more
All industries.....	3,966.8	2,955.3	506.0	309.8	121.4	39.3	28.7	3.3	3.1
Mining and quarrying.....	34.4	18.1	5.9	5.4	2.7	1.1	1.0	.1	.1
Contract construction.....	312.4	210.5	52.1	32.8	11.6	3.3	1.8	.1	.1
Manufacturing.....	329.3	146.6	52.1	56.8	37.9	16.8	15.3	2.0	1.8
Food and kindred products.....	36.1	12.5	7.3	8.0	4.6	1.8	1.6	.2	.1
Textiles and textile products.....	43.5	10.9	5.7	9.1	9.2	4.3	3.6	.4	.3
Leather and leather products.....	6.7	2.4	.8	1.1	1.0	.6	.7	.1	*
Lumber and lumber products.....	84.4	48.8	13.1	12.4	5.9	2.3	1.7	.1	.1
Paper and allied products.....	4.2	1.1	.4	.7	.8	.5	.6	.1	.1
Printing and publishing.....	45.5	26.9	7.3	5.9	3.1	1.2	.9	.1	.1
Chemicals and allied products.....	11.7	4.7	1.9	2.2	1.4	.6	.6	.1	.1
Rubber products.....	1.5	.8	.1	.2	.1	.1	.1	*	*
Stone, clay and glass products.....	12.5	5.6	2.4	2.1	1.2	.5	.5	.1	.1
Metals and metal products.....	58.6	20.0	9.4	11.1	8.2	4.1	4.4	.7	.8
Other manufacturing†.....	24.5	12.9	3.7	3.9	2.2	.9	.7	.1	.1
Transportation, communication and other utilities.....	186.5	143.0	19.1	13.6	6.0	2.1	1.9	.3	.4
Wholesale trade.....	201.4	108.3	42.3	32.6	12.8	3.4	1.8	.1	.1
Retail trade.....	1,704.2	1,332.3	224.3	170.3	29.3	6.2	3.1	.3	.3
General merchandise.....	78.8	59.0	11.1	5.2	2.0	.6	.7	.1	.2
Food and liquor.....	492.8	434.3	40.8	13.2	3.1	.7	.5	.1	.1
Automotive.....	77.9	40.6	15.1	14.9	6.0	1.1	.2	*	*
Apparel and accessories.....	95.4	68.4	14.3	8.4	2.8	.8	.5	*	*
Eating and drinking places.....	324.9	222.6	62.4	31.1	7.0	1.3	.5	*	*
Filling stations.....	229.3	211.2	14.6	3.1	.4	.1	*	*	*
Other retail trade.....	405.1	296.1	66.0	32.5	8.0	1.6	.7	*	*
Finance, insurance and real estate.....	345.8	285.0	33.0	18.2	5.9	1.9	1.4	.2	.1
Service industries.....	852.8	711.5	77.1	42.1	15.1	4.4	2.4	.2	.1
Hotels and other lodging places.....	78.2	62.8	7.5	4.5	1.8	.8	.7	.1	*
Personal services.....	428.2	382.0	26.6	11.8	5.0	1.8	.8	*	*
Business services.....	80.7	57.8	11.6	7.4	2.7	.7	.4	*	*
Automobile repair.....	95.4	75.7	13.3	5.3	.9	.1	*	*	*
Miscellaneous repair.....	104.6	94.4	6.7	2.8	.6	.1	*	*	*
Motion pictures.....	13.2	4.3	3.1	3.7	1.5	.4	.2	*	*
Other amusements.....	52.4	34.4	8.4	6.5	2.5	.5	.2	*	*

* Less than 50 firms. † Includes tobacco and miscellaneous manufactures.

Current Assets and Liabilities of All U. S. Corporations

(in billions of dollars)

Source: U. S. Securities and Exchange Commission

	1939	1945	1947	1948	1949
Total current assets:.....	54.5	97.4	119.9	126.7	124.1
Cash on hand & in banks.....	10.8	21.7	24.1	24.0	24.9
U. S. Govt. securities.....	2.2	21.1	13.8	13.9	15.7
Notes & accounts receivable.....	22.1	25.9	36.4	38.7	38.3
Inventories.....	18.0	26.3	43.9	48.5	43.8
Other.....	1.4	2.4	1.6	1.6	1.4
Total current liabilities:.....	30.0	45.8	59.3	61.9	56.4
Notes & accounts payable.....	21.9	25.7	35.6	37.1	33.7
Federal income tax.....	1.2	10.4	10.6	11.6	9.7
Other.....	6.9	9.7	13.1	13.1	13.0
Net working capital.....	24.5	51.6	60.6	64.8	67.7
Ratio of assets per dollar of liabilities.....	1.8	2.1	2.0	2.0	2.2

Number of Corporations in the U. S.

Source: U. S. Treasury Department.

Year	Active corporation	Inactive corporation
1929.....	456,021	53,415
1930.....	463,036	55,700
1931.....	459,704	56,700
1932.....	451,884	56,752
1933.....	446,842	57,238
1934.....	469,804	59,094
1935.....	477,113	56,518
1936.....	478,857	51,922
1937.....	477,838	51,259
1938.....	471,032	49,469
1939.....	469,617	46,343
1940.....	473,042	43,741
1941.....	468,906	40,160
1942.....	442,665	37,012
1943.....	420,485	35,268
1944.....	412,467	34,329
1945.....	421,125	33,335
1946.....	491,152	35,211
1947.....	551,814	35,876

Regional Economic Differences

Source: U. S. Depts. of Commerce and Labor and Sales Management, American Telephone and Telegraph Co. and Broadcast Measurement Bureau.

State	Value added by mfg. (\$ millions, 1947)*	Est. retail sales† (\$ millions, 1949)	Income received per capita, 1949	% increase per capita income received 1940-49	Manu- facturing employment (in thousands, 1947)*	Per cent of families with telephones, Jan., 1950	Per cent of homes with radios, 1949
New England.....	6,772	8,119	.....	...	1,473	..	..
Maine.....	432	589	1,087	118	100	68	95
New Hampshire.....	307	454	1,195	112	75	70	97
Vermont.....	150	319	1,075	107	35	67	96
Massachusetts.....	3,333	3,979	1,417	85	718	80	99
Rhode Island.....	657	692	1,403	95	146	71	99
Connecticut.....	1,893	1,986	1,591	92	399	86	99
Middle Atlantic.....	20,760	26,459	.....	...	3,955	..	..
New York.....	9,636	13,365	1,758	103	1,777	70	97
New Jersey.....	4,174	4,263	1,546	92	738	73	97
Pennsylvania.....	6,950	8,831	1,416	126	1,440	69	96
East North Central.....	23,481	28,114	.....	...	4,316	..	..
Ohio.....	6,379	6,623	1,436	123	1,195	76	97
Indiana.....	2,979	3,328	1,290	138	548	73	97
Illinois.....	6,674	8,219	1,618	123	1,183	73	98
Michigan.....	5,187	6,504	1,443	122	973	80	98
Wisconsin.....	2,262	3,440	1,329	158	417	74	98
West North Central.....	4,121	13,887	.....	...	785	..	..
Minnesota.....	1,024	2,902	1,227	141	180	81	98
Iowa.....	673	2,760	1,292	166	140	82	97
Missouri.....	1,623	3,763	1,286	155	328	64	94
North Dakota.....	29	591	1,202	224	5	56	97
South Dakota.....	51	667	1,174	210	10	70	96
Nebraska.....	260	1,241	1,294	199	47	74	96
Kansas.....	461	1,964	1,210	187	75	75	95
South Atlantic.....	6,941	13,834	.....	...	1,522	..	..
Delaware.....	182	267	1,675	89	34	72	95
Maryland.....	1,140	1,939	1,401	97	229	65	96
District of Columbia.....	99	982	1,820	67	18	85	97
Virginia.....	1,052	2,027	1,039	133	216	52	90
West Virginia.....	664	1,156	998	151	127	47	92
North Carolina.....	1,646	2,130	854	170	381	37	87
South Carolina.....	795	1,104	787	173	189	30	83
Georgia.....	1,011	2,050	876	176	249	42	83
Florida.....	352	2,178	1,102	134	79	47	87
East South Central.....	2,878	6,503	.....	...	634	..	..
Kentucky.....	745	1,697	865	181	130	41	89
Tennessee.....	956	1,895	873	176	221	52	87
Alabama.....	877	1,769	773	186	206	37	83
Mississippi.....	300	1,142	634	212	77	24	80
West South Central.....	3,015	11,026	.....	...	549	..	..
Arkansas.....	266	1,281	778	208	65	30	84
Louisiana.....	692	1,878	1,002	180	132	47	84
Oklahoma.....	341	1,618	1,068	199	55	58	90
Texas.....	1,716	6,248	1,205	192	297	51	89
Mountain.....	855	4,970	.....	...	146	..	..
Montana.....	108	645	1,390	143	20	59	97
Idaho.....	110	569	1,221	178	17	57	97
Wyoming.....	31	360	1,481	150	5	58	97
Colorado.....	290	1,418	1,386	168	54	74	97
New Mexico.....	55	532	1,033	192	8	40	91
Arizona.....	104	687	1,165	149	14	45	94
Utah.....	129	576	1,213	154	25	72	99
Nevada.....	28	184	1,731	111	3	55	96
Pacific.....	5,541	15,206	.....	...	912	..	..
Washington.....	872	2,305	1,469	134	144	65	98
Oregon.....	673	1,410	1,448	152	105	56	97
California.....	3,996	11,490	1,665	107	663	72	98
Total.....	74,364	128,118	1,330	131	14,292	65	94

* Based on preliminary report of Census of Manufactures. Value added by manufacture is computed by subtracting cost of materials and supplies. † Copyright 1950 Sales Management "Survey of Buying Power"; further reproduction not licensed.

Business Cycles in the United States (Standard Reference Dates)

Source: National Bureau of Economic Research.

Peak of expansion	Trough of contraction	Duration in months		
		Expansion	Contraction	Full cycle
June.....1857*	December.....1858	30	18	48
October.....1860	June.....1861	22	8	30
April.....1865	December.....1867	46	32	78
June.....1869	December.....1870	18	18	36
October.....1873	March.....1879	34	65	99
March.....1882	May.....1885	36	38	74
March.....1887	April.....1888	22	13	35
July.....1890	May.....1891	27	10	37
January.....1893	June.....1894	20	17	37
December.....1895	June.....1897	18	18	36
June.....1899	December.....1900	24	18	42
September.....1902	August.....1904	21	23	44
May.....1907	June.....1908	33	13	46
January.....1910	January.....1912	19	24	43
January.....1913	December.....1914	12	23	35
August.....1918	April.....1919	44	8	52
January.....1920	July.....1921	9	18	27
May.....1923	July.....1924	20	14	34
October.....1926	November.....1927	27	13	40
June.....1929	March.....1933	18	45	63
May.....1937	June.....1938	50	13	63
Average duration 21 cycles 1855 to 1938.....		26.2	21.4	47.6

* Date of previous trough of contraction was December, 1854.

Business Population (in thousands of concerns)

Source: U. S. Department of Commerce, Dun & Bradstreet.

Item	1929	1933	1941	1943	1944	1945	1946	1947	1948	1949
Total operating businesses.....	3,060	2,850	3,392	3,004	3,102	3,303	3,711	3,928	3,989	3,942
Manufacturing.....	251	169	239	240	249	267	316	333	328	299
Wholesale trade.....	120	117	158	139	149	163	187	199	203	204
Retail trade.....	1,361	1,340	1,596	1,376	1,406	1,471	1,612	1,692	1,706	1,690
Transportation, communications, public utilities.....	167	152	148	118	128	143	170	183	189	189
Finance, insurance & real estate.....	306	276	314	303	315	328	341	346	347	346
Service industries.....	596	585	708	641	667	716	793	841	856	849
Mining & quarrying.....	23	21	39	31	31	31	33	34	36	34
Contract construction.....	236	191	191	155	156	185	260	300	325	332
New entrants*.....	—	—	448	143	355	430	619	473	395	358
Discontinued businesses*.....	—	—	411	379	199	203	226	292	374	362
Commercial & industrial failures†.....	23	20	12	3	1	1	1	3	5	9

* Calendar Year. † Closures resulting in a known loss to creditors.

WHAT INDUSTRY MAKES

American industry is the most productive in the world. Because of its unsurpassed stock of modern plants, machinery and other productive equipment, the training and efficiency of its work force of twenty million, and the skillful productive techniques instituted and supervised by intelligent management, industrial output per man-hour in the United States is reliably estimated at approximately twice the British level, three to four times the prewar French and German achievements, and many more times those of other European countries.

Manufacturing is the pivotal industrial occupation, for its periodic expansions and contractions largely determine the level of activity achieved in every other sector of the economy. Most pronounced during the war years was the expansion in durable manufactures, though statistics for most industries show considerable expansion.

The early postwar period saw a quick rise in industrial production for civilian purposes which took up much of the drop in the output of war goods. During 1949 it became apparent that many war born shortages had been made up and there was a drop in the level of production and a shift in its character. Note particularly the tremendous expansion between 1939 and 1947 of men engaged in manufacturing and in manufacturing output for all industrial groups. Also in every line but food products there were many more companies producing in the competitive race than during the depression thirties.

Then, the outbreak of war in Korea changed this picture almost overnight. The need to rebuild the least part of our armed force put a severe strain on critical raw materials and productive facilities. Manpower would have to be diverted to both war production and direct military service.

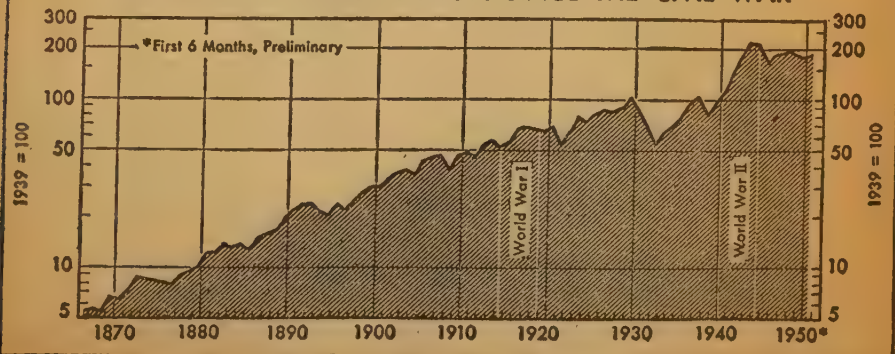
Census of Manufactures by Major Industry Group: 1939 and 1947

Source: Bureau of Census, U. S. Department of Commerce.

Group	No. of establishments (units)		Production and related workers (average for the year) (thousands)		Value added by manufacture* (millions)	
	1939	1947	1939	1947	1939	1947
Food and kindred products.....	43,667	39,904	802	1,098	\$ 3,485	\$ 9,022
Tobacco manufactures.....	765	1,087	88	104	350	643
Textile mill products.....	6,388	8,110	1,081	1,147	1,818	5,334
Apparel and related products.....	20,275	30,905	753	974	1,386	4,423
Lumber and products, except furniture.....	13,208	26,324	423	599	731	2,513
Furniture and fixtures.....	5,178	7,687	189	283	418	1,379
Paper and allied products.....	3,328	4,103	270	389	888	2,875
Printing and publishing industries.....	24,878	28,987	324	438	1,765	4,269
Chemicals and allied products.....	8,839	10,073	276	467	1,819	5,360
Petroleum and coal products.....	1,227	1,387	108	170	697	2,017
Rubber products.....	595	875	121	215	406	1,303
Leather and leather products.....	3,505	5,307	327	349	583	1,485
Stone, clay and glass products.....	6,678	11,650	267	406	856	2,307
Primary metal industries.....	3,512	5,363	672	1,010	2,169	5,775
Fabricated metal products.....	9,532	16,729	451	822	1,401	4,918
Machinery (except electrical).....	8,860	17,907	536	1,244	2,037	7,817
Electrical machinery.....	1,979	3,973	248	639	942	3,894
Transportation equipment.....	2,012	3,706	545	985	1,773	5,860
Instruments and related products.....	1,292	2,599	85	182	333	1,080
Miscellaneous manufactures.....	8,084	14,125	242	397	630	2,090
All industries, total.....	173,802	240,801	7,808	11,918	\$24,487	\$74,364

* Value added by manufacture is computed by subtracting cost of materials and supplies from value of shipments.

U.S. INDUSTRIAL PRODUCTION SINCE THE CIVIL WAR



Industrial Production Indexes, by Groups

(1935-39 average = 100)

Source: Board of Governors of the Federal Reserve System.

Item	1919	1929	1932	1939	1941	1943	1945	1946	1947	1948	1949	1950*
Durable manufactures												
Iron and steel.....	84	133	32	114	186	208	183	150	195	208	188	216
Machinery.....	—	130	43	104	221	443	343	240	277	277	234	249
Transportation equipment.....	—	134	38	103	245	735	487	232	230	235	235	244
Nonferrous metal and products.....	—	136	52	113	191	267	204	157	187	193	160	196
Lumber and products.....	—	146	51	106	134	129	109	131	143	146	130	153
Stone, clay and glass products.....	50	110	51	114	162	173	163	192	206	207	188	199
Total.....	84	132	41	109	201	360	274	192	220	225	202	222
Nondurable manufactures												
Textiles and products.....	73	94	71	112	152	153	146	162	163	170	147	174
Leather and products.....	94	95	76	105	123	114	117	122	116	111	106	108
Manufactured food products.....	77	101	79	108	127	145	150	149	157	159	163	163
Alcoholic beverages.....	—	—	—	98	117	117	178	191	190	185	172	176
Paper and products.....	—	85	65	114	150	139	139	145	158	164	156	179
Tobacco products.....	72	96	79	106	120	133	136	156	160	164	165	165
Printing and publishing.....	—	104	74	106	127	111	108	127	144	154	154	167
Petroleum and coal products.....	—	96	69	110	135	185	236	173	193	218	209	214
Chemical products.....	—	89	68	112	176	384	284	236	251	254	241	253
Rubber products.....	—	100	64	113	163	228	215	225	226	206	183	207
Total.....	62	93	70	109	142	176	166	165	172	177	168	181
Total, durable and nondurable manufactures	72	110	57	109	168	258	214	177	194	199	183	199
Minerals												
Fuels.....	—	103	72	105	122	132	143	142	155	161	139	143
Metals.....	—	134	36	113	149	126	101	88	117	120	107	119
Total.....	71	107	67	106	125	132	137	134	149	155	135	139
Total, manufactures and minerals.....	72	110	58	109	162	239	203	170	187	192	176	190

* First 7 months seasonally adjusted average, preliminary.

Electric Energy Output of Utilities*

(In millions of kilowatt hours)

Source: Federal Power Commission.

Year	Total	Ownership					Source of energy	
		Privately owned	Publicly owned†	Municipal	Federal	Co-operatives, power districts, state projects	% Public to total	Fuels as % of total
1920.....	39,405	37,716	1,689	1,373	58	94	4.3	23,644
1929.....	92,180	87,514	4,667	3,498	300	451	5.1	59,533
1932.....	79,393	74,488	4,905	3,517	445	572	6.2	46,515
1933.....	81,740	76,668	5,072	3,583	459	654	6.2	48,283
1935.....	95,287	89,330	5,958	4,229	555	732	6.3	56,915
1937.....	118,913	110,464	8,449	5,270	1,843	863	7.1	74,900
1938.....	113,812	104,090	9,722	5,237	3,029	994	8.5	69,533
1939.....	127,642	115,078	12,564	5,688	5,476	944	9.8	84,078
1940.....	141,837	125,411	16,426	6,188	8,584	1,175	11.6	94,516
1941.....	164,788	144,290	20,498	7,023	10,793	2,192	12.4	113,925
1942.....	185,979	158,052	27,928	7,610	16,893	2,848	15.0	122,109
1943.....	217,759	180,247	37,511	9,223	24,485	3,156	17.2	144,127
1944.....	228,189	185,850	42,339	9,637	28,866	3,065	18.6	154,244
1945.....	222,486	180,928	41,560	9,624	28,001	3,146	18.7	142,516
1946.....	223,130	181,048	42,081	10,702	26,984	3,596	18.9	144,732
1947.....	255,725	208,061	47,664	12,453	29,890	4,490	18.6	177,000
1948.....	282,698	228,231	54,467	13,122	35,373	5,134	19.3	200,228
1949.....	291,100	233,112	58,820	13,410	38,102	5,643	19.9	201,351

* Output by industrial establishments was as follows (in millions of kilowatt hours): 1939—33,667; 1940—38,070; 1941—43,519; 1942—47,167; 1943—49,781; 1944—51,336; 1945—48,789; 1946—46,431; 1947—51,023; 1948—53,848; 1949—53,967.

† Includes non-central stations.

Fuel Production

Source: U. S. Dept. of Interior, U. S. Dept. of Commerce, and American Gas Association.

Year	Coke, in thousands of short tons	Anthracite coal, in thousands of short tons	Bituminous coal, in thousands of short tons	Natural gas, in millions of cubic feet (produced and marketed)*	Manufactured gas, in millions of cubic feet†	Crude petroleum, in thousands of 42-gal. barrels
1929.....	59,884	73,828	534,989	1,917,693	381,400	1,007,323
1933.....	27,589	49,541	333,631	1,555,474	334,529	905,656
1937.....	52,375	51,856	445,531	2,407,620	328,313	1,279,160
1939.....	44,327	51,487	394,855	2,476,756	334,830	1,264,962
1941.....	65,187	56,368	514,149	2,812,658	369,283	1,402,228
1943.....	71,676	60,644	590,177	3,414,689	417,046	1,505,613
1944.....	74,038	64,445	619,576	3,711,000	430,285	1,677,904
1945.....	67,308	54,830	577,617	3,919,000	477,200	1,713,655
1946.....	58,498	60,507	533,922	4,031,000	492,772	1,733,424
1947.....	73,446	57,190	630,624	4,582,000	527,530	1,856,107
1948.....	74,862	57,140	599,518	5,148,000	524,336	2,016,282
1949.....	66,840	42,664	435,000	5,750,000	495,902	1,840,307
1950†.....	28,367	17,990	186,281	.....	.....	751,369

* Includes all natural gas in sales of natural gas mixed with manufactured gas. † Includes all manufactured gas products produced and purchased by gas utilities. ‡ First 5 months.

Textile Consumption

Source: U. S. Dept. of Commerce.

The Rayon Organon.

Year	Cotton (thousands of bales)	Wool consumption* (millions of lbs.)	Filament rayon yarn (thousands of lbs.)
1920.....	5,843	314	8,760
1929.....	5,407	368	131,760
1932.....	5,017	230	152,520
1941.....	10,586	648	452,520
1943.....	10,666	636	494,400
1944.....	9,691	623	538,800
1945.....	9,143	645	602,400
1946.....	9,827	748	666,400
1947.....	9,539	698	729,300
1948.....	9,099	693	836,500
1949.....	7,875	505	781,100
1950†.....	3,812	255	376,800

* Scoured basis. † First 5 months.

Aircraft Production*

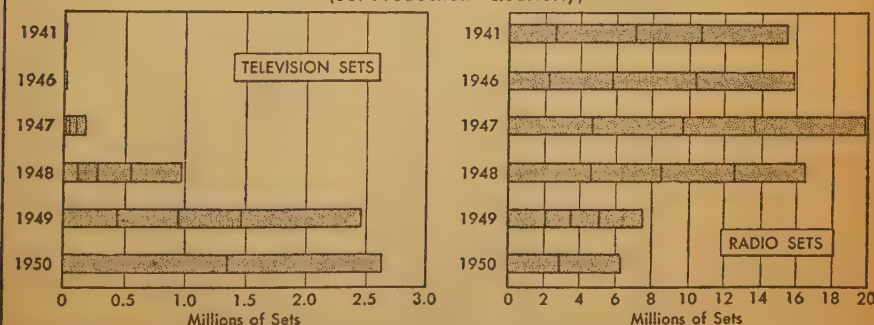
Source: Auto and Aviation Industries.

Year	Number		Total	Value‡ (thousands of dollars)
	Civil†	Military†		
1919.....	.....	.....	662	8,046
1929.....	5,357	677	6,631	51,508
1939.....	3,770	2,141	5,911	75,873
1941.....	6,844	19,433	26,277	819,000
1942.....	985	47,836	48,821	2,762,000
1943.....	.....	85,898	85,898	6,696,000
1944.....	.....	96,318	96,318	9,233,000
1945.....	2,047	47,714	49,761	5,141,000
1946.....	35,001	1,669	36,670	362,772
1947.....	15,617	2,100	17,717	671,432
1948§.....	7,302	.....	7,302	114,208
1949§.....	3,545	.....	3,545	121,446

* Includes airplanes, seaplanes and amphibians.
 † Do not add up to totals because of difference in sources. ‡ Values of engines, propellers and power plant accessories for 1931 to 1940 not included. 1940 to date, included in the value of military aircraft only.
 § Civil production only.

TELEVISION VERSUS RADIO

(Set Production - Quarterly)



Source: Radio Manufacturers Association

Metals Production (In short tons)

Source: American Iron & Steel Institute, *Iron Age*, Copper Institute, Zinc Institute, American Bureau of Metal Statistics and U. S. Bureau of Mines.

Year	Pig iron and ferro-alloys	Steel ingots and castings	Hot rolled finished iron and steel products Total	Plates and sheets	Aluminum (primary)	Copper (smelter output from domestic ore)	Zinc (slab smelter output, all grades)*	Refined lead (from domestic ore; anti-monial lead excluded)
1929.....	47,727,661	63,205,490	45,997,746	13,928,670	113,986	1,001,432	631,601	672,498
1932.....	9,835,227	15,322,901	11,705,219	3,956,505	52,444	272,005	213,531	255,337
1937.....	41,582,550	56,636,945	41,178,356	15,721,261	146,340	834,661	589,619	443,142
1939.....	35,677,097	52,798,714	39,067,553	13,931,919	163,545	712,675	538,198	420,967
1941.....	56,686,604	82,839,259	62,324,187	20,293,071	309,067	966,072	863,955	470,517
1943.....	62,769,947	88,836,512	63,292,673	22,543,040	920,179	1,092,939	971,873	406,544
1945.....	54,919,029	79,701,648	59,811,669	19,314,316	495,060	782,726	799,520	356,535
1946.....	46,514,826	66,602,724	50,936,772	16,324,199	409,630	599,656	759,346	293,309
1947.....	60,117,319	84,894,071	66,202,144	23,325,500	571,750	862,872	848,027	381,109
1948.....	61,911,559	88,640,470	69,191,952	25,694,480	623,456	842,477	850,105	339,413
1949†.....	55,200,000	77,868,353	60,882,387	23,470,886	603,474	750,000	870,113	388,000

* From 1940 includes both foreign and domestic ores. † Preliminary.

Production of Chemicals

Source: U. S. Department of Commerce, U. S. Tariff Commission, U. S. Treasury Department, National Fertilizer Association, U. S. Bureau of Mines; W. P. B.

	Methanol ¹ (in thousands of proof gal.)	Sulfuric acid (in short tons)	Ethyl alcohol (in thousands of proof gal.)	Sulfur (in long tons)	Glycerin ² (in thousands of pounds)	Explosives ³ (in thousands of pounds)	Fertilizer ⁴ (in thousands of short tons)	Paint, varnish, lacquer and fillers ⁵ (in thousands of dollars)
1929.....	12,408 ⁶	2,262,780	206,664	2,357,640	113,140	484,596	8,011	434,820
1932.....	10,116	952,584	128,820	929,556	107,853 ⁷	227,508	4,384	202,920
1937.....	37,560	2,212,212	215,436	2,677,176	122,390	387,804	8,226	402,132
1939.....	38,916	2,051,532	221,628	2,088,384	154,376	372,468	7,707	379,272
1941.....	61,872	6,820,080	367,680	3,131,328	194,327	460,080	9,183	554,196
1943.....	69,804	8,604,576	5,388	2,538,792	159,706	451,776	11,463	568,620
1945.....	77,532	9,552,771	433,122	3,753,188	172,812	440,148	13,202	643,424
1946.....	76,944	9,305,145	244,628	3,859,642	148,562	515,772	14,874	794,899
1947.....	84,707	10,574,941	315,671	4,441,214	191,611	606,870	15,039	1,038,578
1948.....	158,465	10,950,097	324,331	4,869,211	196,279	665,525	15,997	1,053,023
1949.....	127,212	10,844,761	320,852	4,745,014	199,978	604,475	16,376	940,907

¹ Crude and synthetic. ² High gravity and yellow distilled and chemically pure. ³ Shipments. ⁴ Consumption. ⁵ Sales. ⁶ 1930. ⁷ 1933.

Wood Pulp, Paper and Lumber

Source: U. S. Bureau of the Census and National Lumber Manufacturers Assn.

Year	Wood pulp (in thousands of short tons)	Paper and paperboard (in thousands of short tons)	Lumber (in millions of board feet)
1919.....	3,518	6,098	34,552
1929.....	4,863	11,140	36,886
1939.....	6,993	13,510	25,148
1941*.....	10,011	17,934	33,613
1943.....	9,060	17,036	34,289
1944.....	9,446	17,183	32,938
1945.....	9,471	17,374	28,122
1946.....	9,904	19,187	34,112
1947.....	11,952	21,034	35,404
1948.....	12,881	22,061	36,828
1949.....	12,083	20,299	34,419
1950†.....	5,877	9,650	14,744

* Coverage for paper and paperboard increased in 1941. † First 5 months, preliminary.

Number of Nonfarm Houses Built*

Source: U. S. Bureau of Labor Statistics, National Bureau of Economic Research.

Year	Houses	Year	Houses
1900.....	204,000	1935.....	221,000
1905.....	459,000	1936.....	219,000
1910.....	475,000	1937.....	336,000
1915.....	475,000	1938.....	406,000
1920.....	247,000	1939.....	515,000
1922.....	716,000	1940.....	603,000
1925.....	937,000	1941.....	715,000
1926.....	849,000	1942.....	497,000
1927.....	810,000	1943.....	350,000
1928.....	753,000	1944.....	169,000
1929.....	509,000	1945.....	226,000
1930.....	330,000	1946.....	670,500
1931.....	254,000	1947.....	849,000
1932.....	134,000	1948.....	931,000
1933.....	93,000	1949.....	1,025,800
1934.....	126,000	1950†.....	397,600

* Data represents new dwelling units started. † First 4 months, preliminary.

Consumer Durable Goods Output

Source: Electrical Merchandising, Radio and Television Retailing, and Automobile Manufacturers Association.

Year	Electric clothes washers		Electric irons		Electric ranges		Electric vacuum cleaners		Electric refrigerators		Home radio sets		Passenger cars	
	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Factory sales, in thousands	Average factory price
1900.....	...	...	...	...	...	...	...	...	...	...	...	...	4	\$1,229
1910.....	3 ¹	\$75 ¹	...	...	...	...	...	...	...	...	...	...	181	1,190
1915.....	13 ²	80 ²	...	...	...	...	370 ⁴	\$30 ⁴	...	...	...	...	896	643
1920.....	600	120	...	...	40	...	1,024	50	5 ⁵	\$550 ⁵	100 ⁷	\$50 ⁷	1,906	949
1925.....	736	141	2,750	\$5.81	85	\$176	1,056	62	75	425	2,000	83	3,735	658
1929.....	956	113	...	...	173	165	1,253	50	778	292	4,428	136	4,587	621
1932.....	570	59	...	...	60	150	447	40	798	195	3,000	47	1,135	545
1937.....	1,465	72	4,157	3.87	405	134	1,210	56	2,310	171	8,065	56	3,916	573
1940.....	1,455	72	5,171	3.65	450	140	1,341	55	2,600	152	11,800	38	3,717	638
1941.....	1,892	79	5,585	3.78	728	142	1,670	56	3,500	155	13,000	35	3,780	679
1942.....	449	91	1,145	4.34	225	...	580	61 ⁶	520	...	4,400	35	223	738
1945.....	251 ³	...	1,687	...	74	...	258 ⁵	...	264	...	500	40	70	818
1946.....	2,047	121	9,600	8.64	577	186	2,290	68	2,100	207	14,000	50	2,149	921
1947.....	3,657	148	11,004	11.02	1,210	230	3,801	75	3,400	240	17,000	67	3,558	1,114
1948.....	4,196	173	7,360	12.82	1,600	235	3,361	77	4,766	260	14,000	43	3,909	1,220
1949.....	3,065	171	6,310	12.94	1,056	230	2,875	77	4,450	255	10,000	50	5,109	...

¹ 1909. ² 1914. ³ Includes gas engine washers. ⁴ 1918. ⁵ Includes hand cleaners. ⁶ 1921. ⁷ 1922.

New Construction Activity, by Type

(in millions of dollars)

Source: U. S. Department of Commerce and U. S. Department of Labor.

Activity	1929	1933	1940	1945	1947	1948	1949	1950 ¹
Total new construction activity.....	9,913	2,223	8,682	5,633	16,627	21,572	22,594	11,700
New private construction activity.....	7,522	1,005	5,504	3,235	13,131	16,665	16,204	8,759
Residential (nonfarm).....	2,797	278	2,985	1,100	6,310	8,580	8,290	5,118
New dwelling units.....	...	...	2,560	720	5,450	7,500	7,280	4,660
Additions and alterations.....	...	...	335	340	735	925	825	386
Nonhousekeeping.....	...	...	90	40	125	155	185	72
Nonresidential building, except farm and public utility.....	2,822	404	1,025	1,020	3,142	3,621	3,228	1,588
Industrial.....	949	176	442	642	1,702	1,397	972	429
Commercial ²	1,296	135	348	203	856	1,253	1,027	511
Other.....	577	93	235	175	584	971	1,229	648
Public utility.....	1,624	254	771	827	2,338	3,002	3,316	1,465
Railroad.....	510	94	167	264	318	379	352	140
Telephone and telegraph.....	354	45	122	117	510	713	533	223
Other public utility.....	760	115	482	446	1,510	1,910	2,431	1,102
Farm construction.....	279	69	240	267	1,272	1,397	1,292	524
Residential.....	147	43	145	100	611	671	621	...
Nonresidential.....	132	26	95	167	661	726	671	...
All other private.....	...	...	33	21	69	65	78	64
New public construction activity.....	2,391	1,218	3,628	2,398	3,496	4,907	6,390	2,941
Residential.....	...	...	200	80	200	156	359	174
Nonresidential building.....	622	193	615	937	599	1,301	2,056	1,036
Industrial.....	...	2	164	755	96	196	177	73
Educational.....	...	...	156	59	287	618	934	508
Hospital and Institutional.....	462	86	54	85	85	223	477	241
Other.....	160	105	241	38	131	264	468	214
Military and Naval.....	19	36	385	690	204	158	137	55
Highway.....	1,248	675	1,302	398	1,514	1,856	2,129	830
Sewer and water.....	253	81	338	97	351	535	619	299
Conservation and development.....	86	168	528	130	394	629	792	419
All other ³	163	65	260	66	234	272	293	128

¹ First 6 months, preliminary. ² Warehouses, office and loft buildings; stores, restaurants, and garages. ³ Miscellaneous public service enterprises and all Federal not included elsewhere.

Equipment Available in American Homes

Source: Department of Commerce.

Item	All dwelling units, 1940 (thousands)		All ordinary dwelling units, 1947 (thousands)		All ordinary occupied dwelling units, 1947	
	No.	%	No.	%	Owner-occupied %	Tenant-occupied %
Plumbing equipment:						
With private bath & private flush toilet...	20,573	55.1	27,329	65.7	70.4	64.6
With private flush toilet, no private bath...	1,611	4.3	1,633	3.9	2.9	5.1
With running water, no private flush toilet	3,866	10.4	3,643	8.8	7.3	10.6
No running water in dwelling unit.....	11,275	30.2	9,020	21.7	19.4	19.7
Central heating:						
With central heating.....	.....	.....	20,016	48.1	52.9	46.8
Without central heating.....	.....	.....	21,609	51.9	47.1	53.2
Electric lighting:						
With electric lighting.....	29,363	78.7	37,117	89.2	91.7	89.6
Without electric lighting.....	7,962	21.3	4,508	10.8	8.3	10.4
Installed cooking facilities:						
With installed cooking facilities.....	.....	.....	39,913	95.9	97.8	96.1
Without installed cooking facilities.....	.....	.....	1,712	4.1	2.2	3.9
Total.....	37,325	100.0	41,625	100.0	100.0	100.0

WHAT FARMERS PRODUCE

The United States is universally recognized as the industrial giant of the world. Less well known is the fact that it is also by far the leading nation in agricultural output.

There is every reason to believe that this substantial margin of leadership will continue, even expand. For a technological and scientific revolution is taking place in agriculture which may well be fully as important—and as dislocating—as the industrial revolution of the 18th and 19th centuries. This revolution on the farm involves the greater use of more efficient machinery, the better application of chemical fertilizers and insecticides, the introduction of greatly improved strains of seed, and the beginnings of the new industry of "chemical farming."

A foretaste of this technological progress took place during World War II. High costs of keeping working stock and high farm wages made farmers anxious to mechanize their farms, and with war-increased incomes they could afford it. Thanks to mechanization and a ready market here and abroad, farm production was steadily above prewar levels throughout the war and postwar periods. This was accomplished even though farm population declined substantially.

In the early postwar period this record farm production was a highly welcome gift to help us feed a hungry and war-ravished world. As other countries rebuilt their own agricultural output, however, and needed less from us, we seemed to be coming up once more against our old problem of farm surpluses. The war in Korea, however, may well have delayed indefinitely the time when we will really have to face and solve this problem; even limited military needs bid well to drain off what surplus American agriculture is capable of producing.

Population, Farms, and Farm Property

Source: U. S. Bureau of the Census.

Item	1850	1910	1920	1925	1930	1940	1945
Farm population (thousands).....			31,614	*	30,445	30,546	26,220†
Number of farms (thousands).....	1,449	6,361	6,448	6,371	6,288	6,096	5,859
All land in farms (million acres).....	293	878	955	924	986	1,060	1,142
Average acreage per farm.....	202.6	138.1	148.2	145.1	156.9	174.0	194.8
Value of farm property (millions of dollars)...	3,967	40,837	77,923	57,017	56,975	41,254	60,008
Land.....		28,475	54,829	37,721	34,929	23,236‡	
Buildings.....		6,325	11,486	11,746	12,949	10,405‡	46,389
Implements and machinery.....	151	1,265	3,594	2,691	3,301	3,060	5,147§
Livestock.....	544	4,771	8,012	4,858	5,794	4,526	8,472
Total population (thousands).....	23,191	91,972	105,710	114,035	122,775	131,669	125,120†
Urban.....		42,166	54,304	61,451	68,954	74,423	74,570
Rural.....		49,806	51,406	52,584	53,820	57,245	50,580

* Data are not strictly comparable with figures for other years. † 1944. ‡ Excluding armed services. § Excludes automobiles included in earlier years.

Production of Agricultural Commodities, by Kind

Year	Sugar						
	Corn; 1,000 bushels	Wheat; 1,000 bushels	Rice (rough) 1,000 bushels	Beet (chiefly refined) 1,000 pounds	Cane (chiefly raw) 1,000 pounds	Cotton 1,000 bales of 500 lbs.	Tobacco, 1,000 pounds
1900.....	2,661,978	599,315	9,793	172,164	623,772	10,124	851,980
1905.....	2,954,148	706,026	16,038	625,842	781,204	10,576	938,865
1910.....	2,852,794	625,476	24,731	1,020,344	724,000	11,609	1,142,320
1915.....	2,829,044	1,008,637	26,107	1,748,000	282,000	11,172	1,157,425
1920.....	3,070,604	843,277	51,648	2,178,000	360,000	13,429	1,509,212
1925.....	2,798,367	668,700	33,036	1,826,000	284,000	16,105	1,376,008
1929.....	2,515,937	824,183	39,534	2,036,000	436,000	14,825	1,532,676
1934.....	1,448,920	526,052	39,047	2,320,000	534,000	9,636	1,084,589
1939.....	2,580,985	741,210	54,062	3,286,000	1,008,000	11,817	1,880,629
1943.....	2,965,980	843,813	64,843	1,866,000	996,000	11,427	1,406,196
1945.....	2,880,933	1,108,224	68,150	2,366,000	950,000	9,015	1,994,262
1946.....	3,249,950	1,153,046	72,216	2,846,000	850,000	8,640	2,319,409
1947.....	2,383,970	1,367,186	78,259	3,410,000	750,000	11,857	2,167,702
1948.....	3,650,548	1,288,406	81,170	2,784,000	916,000	14,937	1,981,730
1949.....	3,377,790	1,146,463	40,113†	2,924,000	1,040,000	16,128	1,970,376
1950*.....	3,167,607	996,490	36,237†	.....	.....	10,308	1,932,611

* Preliminary estimate. † Thousands of 100-lb. bags.

Domestic Animals on Farms, Number and Value

January 1:	Number (thousands)							Value of all animals except chickens and turkeys (millions of dollars)
	Horses	Mules	Dairy cows	Sheep	Swine	Chickens	Turkeys	
1942.....	9,873	3,782	26,313	56,213	60,607	476,935	7,485	6,596
1943.....	9,605	3,626	27,138	55,150	73,881	542,047	6,600	8,983
1944.....	9,192	3,421	27,704	50,782	83,741	582,197	7,429	8,901
1945.....	8,715	3,235	27,770	46,520	59,331	516,497	7,203	8,279
1946.....	8,053	3,010	26,695	42,436	61,301	530,203	8,493	8,952
1947.....	7,249	2,773	26,098	37,818	56,921	474,441	6,650	11,168
1948.....	6,589	2,541	25,039	34,827	52,028	461,550	4,450	12,668
1949.....	5,898	2,348	24,416	31,654	57,128	448,676	5,540	13,904
1950.....	5,310	2,153	24,625	30,797	60,424	481,190	6,120	12,518

Agricultural
Co-operatives

Source: Farm Credit Administration.

Market- ing season	Number	Estimated membership (thousands)	Business (in millions of dollars)
1915.....	5,424	651	636
1925-26.....	10,803	2,700	2,400
1929-30.....	12,000	3,100	2,500
1931-32.....	11,900	3,200	1,925
1933-34.....	10,900	3,156	1,365
1934-35.....	10,700	3,280	1,530
1935-36.....	10,500	3,660	1,840
1936-37.....	10,743	3,270	2,196
1937-38.....	10,900	3,400	2,400
1938-39.....	10,700	3,300	2,100
1939-40.....	10,700	3,200	2,087
1940-41.....	10,600	3,400	2,280
1941-42.....	10,550	3,600	2,840
1942-43.....	10,450	3,850	3,780
1943-44.....	10,300	4,250	5,160
1944-45.....	10,150	4,505	5,645
1945-46.....	10,150	5,010	6,070
1946-47.....	10,125	5,436	7,116
1947-48.....	10,135	5,900	8,635
1948-49.....	10,075	6,384	9,320

Source: U. S. Department of Agriculture.

Civilian Consumption of
Principal Foods
(in pounds per capita)

Source: U. S. Bureau of Agri. Economics.

Foods	1935-39 avg.	1948	1949
Red meats.....	126.2	146.4	143.9
Poultry meats.....	20.5	26.7	29.3
Eggs.....	298	386	376
Fluid milk and cream.....	340	387	385
Cheese.....	5.5	6.8	7.2
Butter.....	16.7	10.1	10.5
Fats and oilst.....	31.9	35.4	35.7
Fresh fruits.....	138.5	130.6	124.9
Processed fruitst.....	25.4	42.7	30.7
Fresh vegetables.....	235	261	251
Processed vegst.....	39.1	46.6	48.3
Potatoes, sweetpots.....	152.4	121.9	123.3
Sugar.....	97.0	95.7	95.5
Corn products.....	37.5	32.1	32.1
Wheat flour.....	159	137	138
Coffee.....	14.0	18.2	18.6
Tea.....	.67	.56	.59
Cocoa.....	4.4	3.8	4.1

* Number, not pounds. † Excludes butter. ‡ Pack year.

Agricultural Output by States, 1949 Crops

(In thousands of bushels; except cotton lint in thousands of 500 pounds gross weight bales, and tobacco in thousands of pounds) Source: U. S. Department of Agriculture.

State	Wheat	Corn	Oats	Barley	Cotton lint	Potatoes	Tobacco
Alabama.....	180	57,456	4,230	48	852	3,432	400
Arizona.....	700	420	330	5,440	543	1,268	.....
Arkansas.....	390	28,368	6,642	72	1,632	2,080	.....
California.....	11,470	2,376	4,806	47,038	1,268	46,230	.....
Colorado.....	49,551	17,314	7,470	23,256	.....	18,150	.....
Connecticut.....	.....	1,800	222	.....	.....	2,944	26,463
Delaware.....	1,202	4,380	180	336	.....	490	.....
Florida.....	.....	8,983	288	.....	16	5,428	25,061
Georgia.....	2,280	59,400	14,775	95	604	1,296	115,670
Idaho.....	38,106	1,598	7,470	10,098	.....	34,560	.....
Illinois.....	49,379	518,112	168,990	960	.....	1,000	.....
Indiana.....	39,532	247,052	55,825	550	.....	3,900	13,328
Iowa.....	7,856	553,847	238,222	800	.....	1,100	.....
Kansas.....	164,208	73,196	18,942	3,757	.....	1,114	205
Kentucky.....	5,268	88,762	3,328	1,628	.....	2,730	438,245
Louisiana.....	.....	18,446	2,929	.....	650	1,239	200
Maine.....	.....	462	3,990	155	.....	67,050	.....
Maryland.....	6,878	18,354	1,584	2,822	.....	1,587	41,000
Massachusetts.....	.....	1,517	248	.....	.....	2,850	13,259
Michigan.....	35,019	85,920	56,700	3,562	.....	17,160	.....
Minnesota.....	20,058	248,512	178,272	25,464	.....	16,000	580
Mississippi.....	264	47,725	6,893	50	1,487	1,120	.....
Missouri.....	35,028	173,963	43,248	1,840	462	2,432	5,980
Montana.....	64,080	1,572	8,091	12,052	.....	2,100	.....
Nebraska.....	54,408	239,330	49,720	5,833	.....	8,840	.....
Nevada.....	738	90	360	972	.....	342	.....
New Hampshire.....	.....	528	185	.....	.....	968	.....
New Jersey.....	1,992	8,145	1,496	520	.....	8,554	.....
New Mexico.....	4,940	2,160	943	726	276	246	.....
New York.....	11,760	29,610	22,591	1,800	.....	30,660	650
North Carolina.....	5,785	75,565	11,100	900	465	7,869	747,082
North Dakota.....	111,439	23,361	36,550	26,608	.....	18,530	.....
Ohio.....	60,002	202,552	48,024	464	.....	6,270	27,990
Oklahoma.....	88,725	29,392	17,460	1,610	610	814	.....
Oregon.....	23,203	1,095	11,088	9,933	.....	11,890	.....
Pennsylvania.....	21,114	64,077	24,630	5,400	.....	19,158	58,709
Rhode Island.....	.....	266	30	.....	.....	1,160	.....
South Carolina.....	1,930	31,590	16,484	518	554	1,650	147,075
South Dakota.....	34,276	82,824	67,988	14,958	.....	1,008	.....
Tennessee.....	4,350	68,900	6,350	1,276	633	2,250	136,277
Texas.....	102,848	58,208	34,020	2,774	6,040	3,686	.....
Utah.....	9,440	900	2,115	6,063	.....	3,003	.....
Vermont.....	.....	2,565	1,178	23	.....	1,128	.....
Virginia.....	8,732	53,580	4,650	2,700	20	9,126	136,972
Washington.....	57,511	884	6,815	2,871	.....	10,080	.....
West Virginia.....	1,502	11,748	1,606	420	.....	2,000	4,384
Wisconsin.....	2,520	129,800	119,884	6,392	.....	13,600	30,846
Wyoming.....	7,799	1,085	3,982	5,310	.....	1,870	.....
Total.....	1,146,463	3,377,790	1,322,924	238,104	16,127	401,962	1,970,376

U. S. Farm Index

(1910-14=100)

Source: U. S. Department of Agriculture

Year	Prices paid by farmers*	Farm Wage Rate	Prices rec'd by farmers†
1935-39 aver.....	125	121	107
1946.....	207	387	234
1947.....	240	419	275
1948.....	259	442	285
1949.....	250	429	249
1950†.....	252	428	244

* Commodities, interest and taxes and wage rates.
† All crops and livestock. ‡ Average first 7 months.

Farm Tenancy

Source: U. S. Bureau of the Census.

Year	Farms operated by tenants (in thousands)	Total farms	Tenancy as % of total
1880.....	1,025	4,009	25.6
1890.....	1,295	4,565	28.4
1900.....	2,025	5,737	35.3
1910.....	2,355	6,362	37.0
1920.....	2,455	6,448	38.1
1930.....	2,664	6,289	42.4
1940.....	2,361	6,097	38.7
1945.....	1,858	5,859	31.7

WHAT COMMERCE DISTRIBUTES

In a mass-production economy, distribution is a highly intricate process. This is reflected in the fact that more than half the consumer's dollar goes for distribution and less than half for production. (Distribution costs include those of such services as advertising and insurance as well as transportation and selling costs.)

Commerce, like industry and agriculture, has made new records in the last nine years. In the retail trade, the postwar shift in sales from non-durable to durable goods follows the pattern dictated by consumer demand. During the war the military importance of airplanes led many to prophesy that the air age was upon us. However, transportation statistics show that air freight is still suffering from growing pains. It will be some time before a substantial portion of our industrial output is transported by air.

Wholesale and Retail Trade: No. of Establishments, 1939 and 1948*

Source: Bureau of Census, Department of Commerce.

Kind of business group	No. of establishments		Kind of business group	No. of establishments	
	1939	1948		1939	1948
Retail trade, total.....	1,770,355	1,769,993	Drugs, chemicals, allied products	3,298	4,680
Food group.....	560,549	504,480	Tobacco and products (except leaf).....	2,717	2,996
Eating and drinking places.....	305,386	346,555	Dry goods, apparel.....	8,275	11,677
General stores.....	39,688	21,536	Furniture, home furnishings.....	2,214	3,798
General merchandise group.....	50,267	52,604	Paper and its products.....	2,898	4,020
Apparel group.....	106,959	115,333	Farm products—raw materials.....	2,086	2,579
Furniture, furnishings, appliance group.....	52,827	85,548	Automotive.....	7,818	14,615
Automotive group.....	60,132	86,196	Electrical goods.....	3,072	5,421
Gasoline service stations.....	241,858	188,305	Hardware, plumbing, heating.....	3,568	5,876
Lumber, building, hardware group.....	79,313	98,797	Lumber, construction materials.....	3,303	5,885
Drug and proprietary stores.....	57,903	55,851	Machinery equipment & supplies	11,270	21,431
Liquor.....	19,136	33,628	Metals, metalwork (except scrap)	1,017	1,791
Secondhand stores.....	23,962	16,964	Waste materials.....	6,059	7,643
Other retail stores.....	172,375	164,196	Other merchant wholesalers.....	10,508	15,550
Wholesale trade, total.....	199,726	241,529	Manufacturers' sales branches, offices.....	17,926	23,196
Merchant wholesalers, total.....	100,961	146,168	Petroleum bulk stations, terminals.....	30,825	29,238
Groceries, confectionery, meats.....	15,681	17,250	Agents, brokers.....	21,083	24,133
Farm products.....	10,945	13,813	Assemblers (mainly farm products)	28,931	18,794
Beer, wines, distilled spirits.....	6,232	7,143			

* Based on Preliminary Census of Business.

Sales of Leading Retail Outlets

Source: Moody's Manual of Industrials.

		1949 sales* (in thousands)			1949 sales* (in thousands)
DEPARTMENT STORES			DRUG STORES		
J. C. Penney Co.	\$	880,200	Walgreen Co.	\$	163,365
Allied Stores Corp.		407,838	United-Rexall Drug, Inc.		156,384
May Department Stores Co.		392,915	Sterling Drug Co.		133,033
Federated Department Stores		358,551	People's Drug Store, Inc.		46,763
Gimbel Bros., Inc.		280,832	SHOE STORES		
Marshall Field & Co.		207,805	Endicott Johnson Corp.		131,677
R. H. Macy & Co., Inc.		182,457	Melville Shoe Co.		78,029
VARIETY STORES			Edison Bros. Stores, Inc.		74,156
F. W. Woolworth Co.		615,650	A. S. Beck Shoe Corp.		57,088
S. S. Kresge Co.		288,666	G. R. Kinney Co.		35,228
W. T. Grant Co.		233,168	Florsheim Shoe Co.		25,261
S. H. Kress & Co.		163,923	Miles Shoes, Inc.		22,024
G. C. Murphy Co.		141,311	MAIL-ORDER HOUSES		
J. J. Newberry Co.		136,783	Sears-Roebuck & Co.		2,168,928
McCrory Stores Corp.		95,767	Montgomery Ward & Co.		1,084,436
GROCERY STORES			Spiegel, Inc.		132,777
Great Atlantic & Pacific Tea Co.		2,837,291	FURNITURE STORES		
Safeway Stores, Inc.		1,197,827	Barker Bros. Corp.		28,213
Kroger Co.		807,739	Reliable Stores Corp.		23,747
First National Stores, Inc.		354,445	W. & J. Sloane		23,227
American Stores Co.		105,881	Spear & Co.		16,883
			Sterchi Bros. Stores, Inc.		12,967
			Sterling, Inc.		6,739

* For accounting year ending in 1949.

Retail Sales by Kind of Business Group

(in millions of dollars)

Source: U. S. Bureau of the Census.

Kind of business group	1929	1933	1941	1944	1946	1947	1948	1949	1950*
Durable goods stores.....	14,180	4,844	15,604	10,618	22,611	32,142	38,008	39,874	17,805
Automotive group.....	7,043	2,368	8,544	3,465	9,628	15,528	19,309	22,728	10,821
Motor vehicle dealers.....	6,444	2,142	7,794	2,615	7,995	13,850	17,530	21,085	10,166
Parts and accessories.....	599	226	750	850	1,663	1,678	1,779	1,643	656
Building materials and hardware group.....	3,846	1,342	3,862	3,717	6,750	9,092	10,710	9,509	3,942
Building materials.....	2,621	854	2,435	2,171	4,137	5,695	6,801	6,020	2,604
Farm implements.....	519	177	524	539	787	1,180	1,555	1,401	561
Hardware.....	706	311	903	1,007	1,826	2,217	2,354	2,088	776
Home furnishings group.....	2,755	959	2,611	2,454	4,860	6,213	6,725	6,537	2,694
Furniture and house furnishings.....	1,813	646	1,787	1,951	3,175	3,746	4,045	3,744	1,507
Household appliances and radios.....	942	313	824	503	1,685	2,467	2,680	2,793	1,186
Jewelry.....	536	175	587	982	1,343	1,309	1,264	1,100	348
Nondurable goods stores.....	34,279	19,673	39,886	58,205	77,687	86,766	92,034	88,309	34,783
Apparel group.....	4,241	1,930	4,157	6,869	8,981	9,413	9,865	9,175	3,471
Men's clothing and furnishings.....	1,358	542	1,096	1,618	2,227	2,414	2,412	2,223	817
Women's apparel and accessories.....	1,480	754	1,690	3,193	4,033	4,141	4,530	4,193	1,587
Family and other apparel.....	596	209	605	986	1,262	1,325	1,386	1,281	478
Shoes.....	807	425	766	1,072	1,459	1,533	1,537	1,478	589
Drug Stores.....	1,690	1,066	1,821	2,811	3,520	3,659	3,687	3,605	1,443
Eating and drinking places.....	2,125	1,430	4,796	9,051	11,962	12,035	12,112	11,240	4,388
Food group.....	10,967	6,776	12,576	17,940	24,005	28,384	30,506	30,298	12,301
Grocery and combination.....	7,353	5,004	9,604	13,662	18,477	22,364	24,111	24,154	9,881
Other food.....	3,614	1,772	2,972	4,278	5,528	6,020	6,395	6,144	2,419
Filling stations.....	1,787	1,532	3,454	2,604	4,065	5,193	6,325	6,363	2,548
General merchandise group.....	9,015	4,982	7,931	10,890	14,611	16,033	17,015	16,019	5,843
Department, including mail order.....	4,350	2,538	5,027	6,764	9,621	10,645	11,337	10,618	3,896
General, incl. gen. mdse., with food.....	2,710	1,176	991	1,388	1,676	1,858	1,938	1,769	645
Other general mdse. and dry goods.....	1,051	590	738	1,208	1,463	1,538	1,609	1,509	547
Variety.....	904	678	1,175	1,530	1,851	1,992	2,131	2,123	755
Other retail stores.....	4,454	1,957	5,151	8,040	10,543	12,049	12,524	11,609	4,786
Liquor.....	17	767	1,485	1,973	1,916	1,854	1,760	1,760	657
Other.....	4,454	1,940	4,384	6,555	8,570	10,133	10,670	9,849	4,130
All retail stores.....	48,459	24,517	55,490	68,823	100,298	118,908	130,042	128,183	52,587

* First 5 months, not adjusted for seasonal variation.

Wholesale Sales

(in millions of dollars)

Source: U. S. Department of Commerce.

Type of establishment	1929	1933	1941	1943	1945	1947	1948	1949
Service and limited function.....	30,343	12,950	33,654	37,756	44,657	70,080	73,692	65,762
Durable goods.....	7,700	2,489	11,562	9,002	10,439	21,721	24,501	20,715
Automotive*.....	1,383	438	2,849	968	1,520	2,502	2,545	2,158
Lumber and building material.....	1,920	492	2,127	1,944	2,052	4,561	5,267	4,414
Electrical goods.....	917	290	1,459	1,007	1,339	4,316	5,084	4,677
Hardware.....	715	340	897	866	1,163	2,543	2,826	2,352
Housefurnishings.....	495	175	543	501	450	1,108	1,273	1,307
Jewelry and optical.....	380	105	410	471	507	642	638	505
Machinery and metals.....	1,890	649	3,277	3,245	3,408	6,049	6,868	5,302
Nondurable goods.....	22,643	10,461	22,092	28,754	34,218	48,359	49,191	45,047
Apparel and dry goods.....	2,850	1,250	2,739	3,653	3,744	6,523	6,176	4,978
Beers, wines and liquors.....	21	130	1,779	2,363	3,726	4,245	4,082	4,022
Drugs and sundries.....	535	352	658	776	1,121	1,494	1,640	1,644
Food.....	8,600	4,743	8,219	10,617	12,364	16,958	17,084	15,304
Paper and its products.....	704	334	750	801	866	1,625	1,575	1,437
Tobacco products.....	859	526	1,290	1,600	1,826	2,390	2,243	2,084
All other.....	9,074	3,126	6,657	8,944	10,571	15,124	16,391	15,578
All establishments.....	37,814	16,550	43,440	51,275	59,799	93,054	100,263	90,114
Durable goods.....	7,827	2,548	11,971	9,313	10,787	22,322	25,532	21,236
Nondurable goods.....	29,987	14,002	31,469	41,962	49,012	70,732	74,731	68,878

* Beginning in 1943, series excludes all sales of new motor vehicles.

Chain Stores vs. Independent Stores (in millions of dollars)

	1929	1933	1941	1944	1946	1947	1948	1949	1950*
Chain store & mail order.....	10,412	6,618	12,434	15,486	21,111	25,338	27,892	27,088	10,709
Independent.....	38,047	17,879	43,056	53,337	79,187	93,570	102,150	101,096	42,878
Total sales.....	48,459	24,517	55,490	68,823	100,298	118,908	130,042	128,184	52,587
Chains as percent of total.....	21.5	27.0	22.4	22.5	21.0	21.3	21.4	21.1	20.4

* First 5 months, not adjusted for seasonal variation.

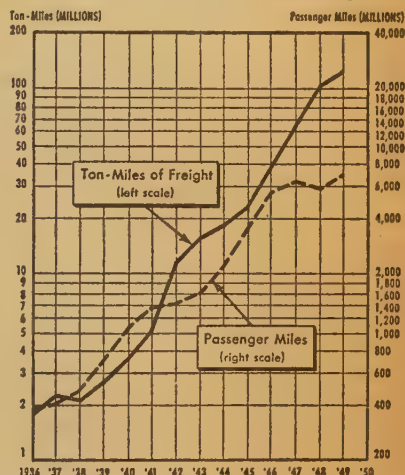
Monthly Average Railroad Carloadings (in thousands of cars)

Source: Association of American Railroads.

Year	Total*	Coal, coke & ore	Grain & products	Less-than-carload merchandise
1920...	3,760	1,095	154	751
1925...	4,269	962	192	1,099
1929...	4,402	1,001	200	1,100
1932...	2,348	482	138	756
1937...	3,139	807	149	705
1939...	2,826	676	162	653
1941...	3,524	913	169	670
1942...	3,568	1,008	181	465
1943...	3,535	1,001	222	423
1944...	3,674	1,043	213	459
1945...	3,492	955	228	461
1946...	3,445	882	208	528
1947...	3,708	1,039	227	506
1948...	3,643	1,044	209	464
1949...	2,992	751	216	382
1950†...	2,796	677	170	342

* Includes forest products, livestock & miscellaneous group not listed separately. † First five months.

DOMESTIC AIRLINES' TRAFFIC



SOURCE: CIVIL AERONAUTICS ADMINISTRATION

Steam Railways

Source: Association of American Railroads and the Interstate Commerce Commission.

	1920	1930	1940	1945	1948	1949
Av. first-track mileage operated (thousands).....	259,941	260,443	245,740	227,877	226,981	225,437
Passengers carried (thousands).....	1,269,913	707,987	456,088	891,128	642,781	554,506
Passenger revenue (thousand dollars).....	1,304,815	730,766	417,955	716,379	964,089	860,525
Average journey per passenger (miles).....	37.30	37.96	52.22	102.92	64.1	63.3
Total tons revenue freight carried (thousands).....	2,427,622	2,179,015	1,947,479	2,823,992	2,847,897	2,311,682
Freight revenue (thousand dollars).....	4,420,833	4,145,015	3,584,201	6,533,767	7,979,931	7,051,969
Operating revenues (thousand dollars).....	6,301,151	5,356,484	4,354,712	8,902,248	9,671,576	8,580,321
Operating expenses (thousand dollars).....	5,954,394	3,993,621	3,131,598	7,051,627	7,471,554	6,891,786
Net railways operating income (thousand dollars).....	12,101	874,154	690,554	852,147	1,002,352	686,515
Net capitalization (million dollars).....	16,994	19,066	17,630	15,667	15,467	.....
Average number of employees (all carriers).....	.....	1,571,559	1,091,692	1,419,505	1,326,597	1,191,444
Total compensation per year (thousand dollars).....	.....	.....	2,079,107	3,862,001	4,922,516	4,419,433
Roads under receivership and trusteeship.....	61	30	103	72	46	44
Miles of roads under rec. and trusteeship.....	16,290	9,486	75,270	39,714	13,859	13,058
Number of locomotives—Dec. 31.....	68,942	60,189	44,333	43,530	41,851	40,691
Number of freight-train cars—Dec. 31.....	2,388,424	2,322,267	1,684,171	1,784,674	1,783,363	1,777,661
Number of pass.-train cars—Dec. 31.....	56,102	53,584	38,308	38,273	39,142	37,771

WHAT SERVICES CONTRIBUTE

Manufacturing and agriculture can grow steadily more efficient only because they take advantage of various types of business, professional and scientific services. For example, mass production would be impossible without modern accounting systems; and large-scale agriculture could hardly exist without scientific crop and weather services.

Personal services are the remaining stronghold of small, individual enterprise. More than 600,000 small businesses performed 66 per cent of those services in 1939. The service industries are the only ones where small business produces half the total up to output.

But there are big as well as small businesses among the service industries. Financing of the nation's business and much of its government is made possible by the highly organized financial services. Insurance is another field where big as well as small firms fill our steadily increasing demand for all forms of protection.

Through ownership of stocks, bonds, life insurance and savings accounts we all contribute and have a stake in this financing of our complex economic machinery. Contrary to the steady advance of almost all other indices, however, stock and bond yields to the investor have declined steadily throughout the war and have only in recent years begun to stabilize.

Number of Service Establishments and Places of Amusement, 1939

Source: U. S. Department of Commerce.

Kind of business	Establishments	Kind of business	Establishments
PERSONAL SERVICES:		Blacksmith shops.....	16,797
Barber shops.....	117,998	Boat repair shops.....	464
Barber and beauty shops.....	4,199	Electrical appliance repair.....	3,615
Baths and masseurs.....	1,600	Jewelry repair.....	12,485
Beauty parlors.....	83,071	Leather goods repair.....	2,168
Cleaning and repair shops.....	52,516	Locksmiths and gunsmiths.....	2,252
Cleaning and dyeing plants.....	11,604	Musical instrument repair.....	461
Cleaning and renovating hats.....	1,288	Piano and organ repair.....	521
Costume rental agencies.....	417	Radio repair.....	10,732
Fur repair and storage.....	2,180	Refrigerator repair.....	1,297
Laundries, all types.....	22,018	Sewing machine repair.....	355
Linen supply service.....	718	Stove repair.....	365
Morticians' establishments.....	18,196	Tool repair.....	1,451
Photographic studios.....	10,957	Typewriter repair.....	618
Rug cleaning services.....	1,012	Upholstery, furniture.....	9,685
Shoe repair shops.....	50,115	CUSTOM INDUSTRIES:	
Shoe shine parlors.....	7,968	Awning and tent.....	942
Travel bureaus.....	741	Bookbinding.....	314
BUSINESS SERVICES:		Bottling works.....	705
Adjustment and credit.....	2,576	Cabinetworking, woodworking.....	2,862
Advertising agencies.....	1,628	Cider mills and presses.....	241
Auctioneers.....	970	Clothing contract work shops.....	518
Billboard advertising.....	679	Custom slaughtering.....	268
Blueprinting and photostat.....	500	Grist mills.....	9,217
Booking agents' offices.....	520	Machine shops.....	3,117
Coin-operated machines.....	1,554	Mattress repair shops.....	1,386
Cotton compresses.....	315	Metal plating shops.....	379
Dental laboratories.....	2,080	Neon sign manufacturing.....	359
Detective agencies.....	280	Printing shops.....	13,570
Disinfecting, exterminating.....	952	Sawmills and planing mills.....	12,775
Employment agencies.....	1,424	Sewing establishments.....	808
Mailing services.....	1,433	Tinsmith shops.....	1,483
Photo finishing laboratories.....	1,201	Tire retreading shops.....	863
Public stenographic service.....	1,329	Welding shops.....	4,118
Sign painting shops.....	5,391	MISCELLANEOUS SERVICES:	
Window cleaning service.....	823	Circulating libraries.....	783
Window display service.....	215	Interior decorators.....	461
SERVICES ALLIED TO TRANSPORTATION:		Landscape service.....	1,148
Packing and crating.....	110	Livery stables.....	201
Stevedoring service.....	198	Taxidermists.....	363
Stockyard service.....	95	AMUSEMENT PLACES:	
Warehousing.....	3,404	Amusement devices.....	1,093
Weighing service.....	140	Amusement parks.....	245
REPAIR SERVICES:		Bands and orchestras.....	550
Automotive repairs and services.....	978	Bathing beaches (not municipal).....	344
Armature rewinding shops.....	78,881	Bicycle rentals.....	247
Bicycle repair shops.....	1,601	Billiard and pool parlors.....	12,998
		Boat and canoe rental.....	1,382

AMUSEMENT PLACES (Cont.):

Bowling alleys.....	4,646
Clubs, baseball.....	276
Dance halls, studios.....	2,191
Race tracks, dog, horse, auto.....	92
Riding academies.....	840
Shooting galleries.....	32
Skating rinks, ice and roller.....	1,194
Sports and athletic fields.....	73
Sports promoters.....	118
Swimming pools (not municipal).....	660
Theaters, motion-picture.....	15,118
Theaters, other.....	231

Hotels

Source: Horwath & Horwath.

Year	Percent of rooms occupied	Average sale per occupied room (\$)	Restaurant sales (1929 = 100)
1929.....	70	4.04	100
1933.....	51	2.88	49
1939.....	62	3.31	90
1945.....	91	4.06	200
1946.....	93	4.23	230
1947.....	90	4.77	230
1948.....	86	5.27	228
1949.....	82	5.47	219
1950*.....	82	5.42	221

*First 5 months.

Cost of Advertising Facilities

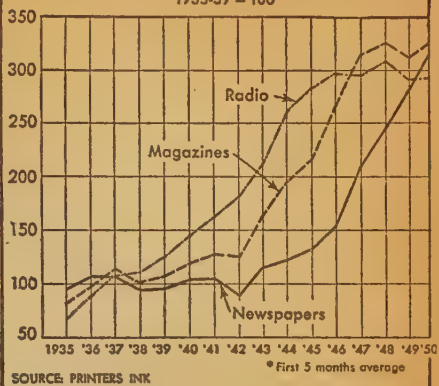
Source: U. S. Dept. of Commerce.

Monthly average	Radio (in thousands of dollars)	Magazine (in thousands of dollars)
1933.....	2,626	8,155
1939.....	6,926	12,587
1941.....	8,841	15,007
1945.....	15,896	25,531
1946.....	16,017	32,063
1947.....	15,910	37,340
1948.....	16,583	42,166
1949.....	15,650	41,070
1950*.....	16,151	43,491

*Average first 6 months, preliminary.

ADVERTISING EXPENDITURES

1935-39 = 100

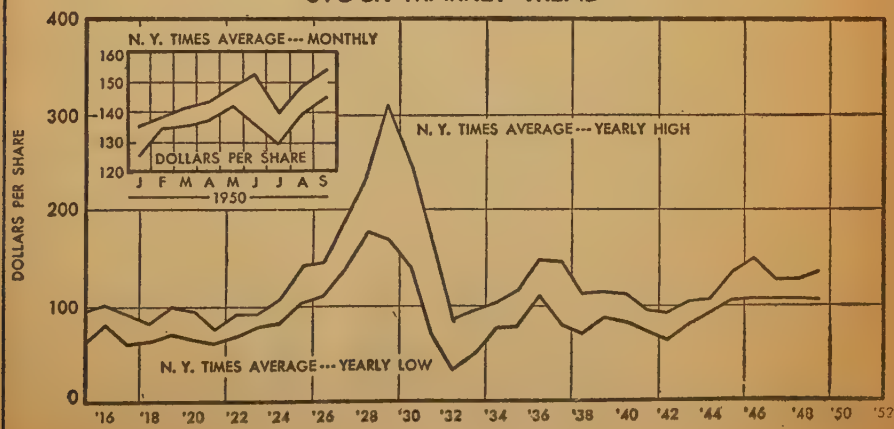


Advertising Media, 1949

Source: Printers' Ink.

Medium	Volume (in millions of dollars)	% of total
Newspapers.....	1,905.0	36.6
Radio.....	633.8	12.2
Magazines.....	492.5	9.5
Direct mail.....	755.6	14.5
Business papers.....	248.1	4.8
Outdoor.....	131.0	2.5
Farm papers.....	20.5	0.4
Television.....	63.0	1.2
Miscellaneous.....	952.7	18.3
Total.....	5,202.2	100.0

STOCK MARKET TREND



New York Stock Exchange Sales

Source: Commercial & Financial Chronicle, New York Stock Exchange.

Year	Stocks, millions of shares	Bonds, par val. (millions of dollars)			
		Total	Corporate	U. S. government	State, municipal, foreign
1919.....	317	3,809	622	2,901	286
1929.....	1,125	2,982	2,182	142	658
1932.....	425	2,967	1,642	570	755
1939.....	262	2,046	1,480	311	255
1941.....	171	2,112	1,929	20	163
1943.....	279	3,255	3,130	4	120
1945.....	378	2,262	2,148	8	106
1946.....	364	1,364	1,265	19	81
1947.....	254	1,076	970	3	102
1948.....	302	1,014	925	1	87
1949.....	272	818 ²	725 ³	(⁹)	93 ⁵
1950 [†]	304	689 ²	625 ³	(⁹)	64 ⁵

¹ Jan. 1-Aug. 4. ² Includes International Bank. ³ Railroad and industrial. ⁴ Less than 1. ⁵ Foreign.

Stock Prices per Share*

Dow-Jones & Co., Inc. Averages

(in dollars)

Year	Total (65)	Industrials (30)	Public utilities (15)	Railroads (20)
1929.....	125.43	311.24	104.48	159.66
1932.....	26.82	64.57	26.89	27.46
1937.....	58.08	166.36	28.17	49.51
1939.....	48.01	142.66	24.43	30.01
1941.....	41.22	121.82	18.02	28.36
1942.....	36.04	107.20	12.63	26.38
1943.....	46.39	134.81	19.82	33.71
1945.....	63.72	169.82	32.15	56.56
1946.....	71.01	191.65	40.56	58.07
1947.....	63.31	177.58	35.06	48.14
1948.....	66.32	179.95	34.03	56.73
1949.....	64.37	179.48	36.44	47.77
1950 [†]	74.97	209.70	42.21	55.55

* Averages of daily closings.

[†] First 7 months.

Stock and Bond Yields—Percent

Year	Bonds							Stocks				
	U. S. Treasury (Treasury Dept.)*	Municipal (Bond Buyer) (20 cities)	Corporate (Moody's Investors' Service)				Municipal (Standard and Poor's Corp.) (15)	Preferred (Standard and Poor's Corp.) (15)	Common (Moody's Investors' Service)			
			Total	Industrial	Railroad	Public utility			Total (200)†	Industrial (125)	Railroad (25)	Public utility (24)
1929.....		4.31	5.21	5.31	5.18	5.14	4.27	5.12	3.5	4.0	4.4	2.1
1932.....		4.79	6.87	6.71	7.61	6.30	4.65	6.13	7.4	7.3	6.3	7.5
1939.....		2.83	3.77	3.30	4.53	3.48	2.76	4.17	4.2	3.9	3.7	5.3
1941.....		2.14	3.34	2.95	3.95	3.11	2.10	4.08	6.2	6.3	6.5	8.0
1942.....	2.46	2.26	3.34	2.96	3.96	3.11	2.36	4.31	6.6	6.4	7.7	9.8
1943.....	2.47	1.93	3.16	2.85	3.64	2.99	2.06	4.06	4.8	4.5	6.9	6.8
1945.....	2.37	1.50	2.87	2.68	3.06	2.89	1.67	3.70	4.1	4.0	5.5	5.0
1946.....	2.19	1.49	2.74	2.60	2.91	2.71	1.64	3.53	3.9	3.7	5.5	4.2
1947.....	2.25	1.89	2.86	2.67	3.11	2.78	2.01	3.79	5.1	5.0	6.4	5.3
1948.....	2.44	2.37	3.08	2.87	3.34	3.03	2.40	4.15§	5.8	5.9	6.0	5.9
1949.....	2.31	2.15	2.96	2.74	3.24	2.90	2.21	3.97§	6.6	6.8	8.5	5.9
1950†.....	2.28	1.99	2.85	2.65	3.11	2.80	2.08	3.84§	6.1	6.3	6.7	5.4

* Taxable, 15 years and over. [†] Includes 15 banks and 10 insurance stocks. [‡] Average of first 7 months. [§] Data for Aug.-Sept. based on 14 stocks; from Oct., 1948 based on 11 stocks.

Note: Figures in parentheses represent number of issues.

Federal Reserve System, All Member Banks, Principal Assets and Liabilities*
(all money figures in millions of dollars)

Source: Federal Reserve Board.

	1925	1930	1935	1940	1945	1948	1949	1950 [†]
Loans.....	21,996	23,870	12,175	15,321	22,775	36,061	36,230	38,760
U. S. Gov't obligations.....	3,728	4,125	12,268	15,823	78,338	52,154	56,883	55,026
Other security investments.....	5,160	6,864	5,541	5,982	6,070	7,403	8,414	9,504
Total deposits [‡]	34,250	37,029	38,454	56,430	129,670	121,362	123,885	122,710
Demand deposits.....	19,124	18,796	21,056	33,829	91,820	80,881	82,628	82,606
Time deposits.....	10,557	13,012	10,401	12,178	24,210	28,840	29,160	29,367
Capital accounts.....	4,678	6,593	5,145	5,698	7,589	8,801	9,174	9,568
Number of banks.....	9,489	8,052	6,387	6,486	6,884	6,918	6,892	6,886

* End of year. [†] As of July 26. [‡] Includes interbank deposits, domestic and foreign, and U. S. Government and Postal Savings deposits.

Bank Debits to Deposit Accounts (except interbank)* (in millions of dollars)

Source: Board of Governors of Federal Reserve System.

1929.....	935,030	1941.....	491,649	1945.....	884,303	1948.....	1,116,936
1932.....	322,365	1943.....	715,782	1946.....	944,811	1949.....	1,101,802
1939.....	389,677	1944.....	807,939	1947.....	1,005,568	1950†.....	584,724

* Includes 141 leading cities.

† First 6 months.

Money and Interest Rates (Per cent per annum)

Source: Federal Reserve Board.

Year	Open market rate in New York City			Commercial loan rates		
	Prime commercial paper, 4 to 6 months*	Prime bankers' acceptances, 90 days*	Call loans, renewal rate†	New York City	7 other northern & eastern cities	11 southern & western cities
1929.....	5.85	5.03	7.61	5.76	5.82	5.93
1931.....	2.64	1.57	1.74	3.82	4.26	4.90
1932.....	2.73	1.28	2.05	4.20	4.81	5.21
1933.....	1.73	.63	1.16	3.43	4.46	5.04
1934.....	1.02	.25	1.00	2.45	3.71	4.32
1935.....	.76	.13	.56	1.76	3.39	3.76
1937.....	.94	.43	1.00	1.73	2.88	3.25
1938.....	.81	.44	1.00	1.69	2.75	3.26
1939.....	.59	.44	1.00	2.07	2.87	3.51
1940.....	.56	.44	1.00	2.04	2.56	3.38
1941.....	.54	.44	1.00	1.97	2.55	3.19
1942.....	.66	.44	1.00	2.07	2.58	3.26
1943.....	.69	.44	1.00	2.30	2.80	3.13
1944.....	.73	.44	1.00	2.11	2.68	3.02
1945.....	.75	.44	1.00	1.99	2.51	2.73
1946.....	.81	.61	1.16	1.82	2.43	2.85
1947.....	1.03	.87	1.38	1.81	2.33	2.76
1948.....	1.44	1.11	1.55	2.22	2.57	2.95
1949.....	1.48	1.12	1.63	2.37	2.71	3.10
1950†.....	1.31	1.06	1.63	2.32	2.61	3.17

* Prevailing rate. † New York Stock Exchange; average of daily quotations. ‡ First six months.

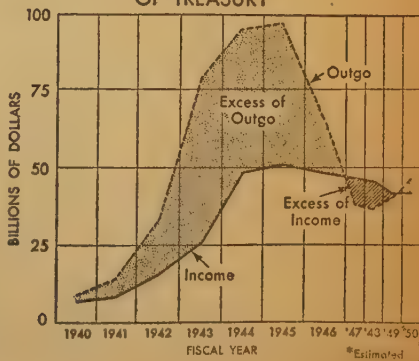
Assets and Liabilities, Active Banks in U. S., Dec. 31, 1949 (in millions of dollars except no. of banks)

Source: U. S. Treasury Department.

	All banks	Commercial banks*	Mutual savings banks
Number of banks.....	14,705	14,174	531
Loans and discounts....	49,828	43,250	6,578
Investments.....	91,437	77,614	13,823
Cash and balances with other banks.....	36,676	35,803	873
Total assets.....	180,043	158,550	21,493
Capital, surplus, and undivided profits.....	13,166	11,044	2,122
Total deposits.....	165,244	145,951	19,294
Demand.....	108,976	108,956	20
Time.....	56,268	36,994	19,274

* Comprises national banks, state commercial banks and private banks.

CASH INCOME AND OUTGO OF TREASURY



Insurance Premiums and Losses

(in thousands of dollars)

Source: *The Spectator*, Philadelphia, Pa., and National Board of Fire Underwriters.

Type	1939	1943	1944	1945	1946	1947	1948	1949
Casualty, surety, and miscellaneous companies								
Net premiums written...	1,191,838	1,703,797	1,525,586	1,631,649	2,011,262	2,591,065	3,071,838	3,877,190†
Losses paid†.....	484,343	659,365	717,646	799,193	1,006,954	1,208,360	1,425,594	1,632,985†
Fire and marine insurance business*								
Net premiums written...	907,003	1,334,491	1,421,904	1,555,935	2,042,435	2,453,421	2,740,726	2,955,796†
Losses paid†.....	404,800	560,175	660,887	748,664	896,153	1,064,316	1,195,472	1,331,194†
Total fire losses in United States.....	313,499	380,235	423,538	455,329	561,487	692,635	711,114	667,536

* U. S. and outlying territories and possessions.

† Includes adjustment expenses. ‡ Estimated.

Life Insurance—Financial Condition and Policy Accounts of U. S. Companies

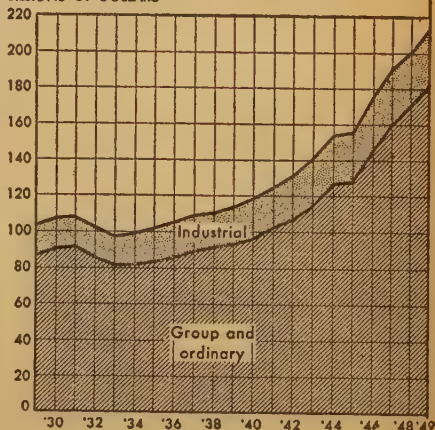
(in millions of dollars)

Source: *The Spectator*, Philadelphia, Pa.

Year	Assets (admitted) Dec. 31	Total income	Premium income	Payment to policyholders
1880....	453	81	....	56
1890....	771	197	158	90
1900....	1,742	401	325	169
1910....	3,876	781	593	387
1920....	7,320	1,764	1,385	745
1929....	17,482	4,337	3,350	1,962
1932....	20,754	4,653	3,504	3,087
1939....	29,243	5,453	3,825	2,642
1943....	37,766	6,442	4,421	2,407
1944....	41,054	7,011	4,869	2,528
1945....	44,797	7,674	5,249	2,719
1946....	48,191	8,068	5,727	2,848
1947....	51,743	8,982	6,635	2,971
1948....	55,512	9,603	7,131	3,237
1949....	59,625	10,517	7,630	3,996

LIFE INSURANCE IN FORCE IN U. S.

BILLIONS OF DOLLARS



Source: *The Spectator* Company

WHAT GOVERNMENT DOES AND COSTS

Ever since the Civil War, the role of government in the American economy has been steadily expanding. While probably more citizens have opposed this trend in the United States than in any other major nation, it has persisted. In the last two decades, first depression, and then war and its dislocations, have sharply accelerated the momentum of such government intervention.

Although many Americans have disliked and distrusted big government, federal power has grown steadily since the Civil War. It seems inevitable that the government will continue to accept an increasingly important role in the economy.

Post-war budgets have been higher than those in any pre-war period. In the peacetime budget for 1949-50, half the government's expenses were concerned with our national and international defense needs. The outbreak of the Korean war and the new rearmament effort starting in 1950 mean an even heavier military burden on the budget. How to distribute the remaining billions among tax relief, debt reductions and social programs will continue to be a major problem.

Our federal government has become so large, and its activities so numerous, that we are likely to overlook the many services performed at the state and local government levels. Nevertheless, in 1949 state and local expenditures amounted to \$11.8 billion, or more than 20 per cent of total government outlay.

The costs of running the more than 155,000 government units in the nation are immense. The variety of uses to which the billions of dollars raised in taxes or by borrowing is put is bewildering. This section spreads the central facts and figures before you.

Receipts and Expenditures of the National Government (in millions of dollars) Source: U. S. Treasury Department.

Yearly average or year ended June 30	Receipts						Expenditures					
	Customs (including tonnage tax) ¹	Internal revenue		Other receipts	Total receipts	Net receipts ²	Department of the Army ³	Department of the Navy	Interest on public debt	All other	Total expendi- tures ⁴	Surplus (+) or deficit (-)
		Income and profits tax										
		Income	Other									
1789-1800.....	6	.....	.....	.....	7	7	2	.....	3	1	6	.....
1801-1810.....	12	.....	.....	.....	13	13	2	1	4	2	9	+4
1811-1820.....	16	.....	2	.....	21	21	11	5	5	3	24	-3
1821-1830.....	20	.....	.....	.....	22	22	4	3	4	5	16	+6
1831-1840.....	20	.....	10	.....	30	30	8	5	.....	11	24	+6
1841-1850.....	24	.....	3	.....	27	27	13	7	.....	11	32	-5
1851-1860.....	54	.....	.....	.....	60	60	16	12	3	29	60	.....
1861-1865.....	69	17	55	20	161	161	548	65	35	36	684	-523
1866-1870.....	179	51	171	46	447	447	128	28	135	86	377	+70
1871-1875.....	186	8	113	30	337	337	40	23	112	102	287	+50
1876-1880.....	146	.....	117	25	288	288	37	16	100	102	255	+33
1881-1885.....	202	.....	132	33	367	367	43	16	64	135	258	+109
1886-1890.....	216	.....	127	32	375	375	43	16	44	177	279	+96
1891-1895.....	177	.....	150	26	353	353	50	29	30	255	364	-11
1896-1900.....	185	.....	207	43	435	435	111	48	38	260	457	-22
1901-1905.....	260	.....	255	44	559	559	133	86	28	288	535	+24
1906-1910.....	311	4	257	56	628	628	169	113	23	334	639	-11
1915.....	210	80	336	72	698	698	202	142	23	394	761	-63
1917.....	226	360	378	89	1,125	1,125	378	240	25	1,335	1,978	-853
1918.....	180	2,314	872	299	3,665	3,665	4,870	1,279	190	6,358	12,697	-9,032
1919.....	184	3,019	1,297	653	5,152	5,152	9,009	2,002	619	6,885	18,515	-13,363
1920.....	323	3,945	1,460	966	6,694	6,694	1,622	736	1,020	3,025	6,403	+291
1929.....	602	2,331	607	493	4,033	4,033	426	365	678	1,830	3,299	+734
1933.....	251	746	225	225	2,080	2,021	435	349	689	3,150	4,623	-2,602
1937.....	486	2,163	858	225	5,294	4,979	628	557	866	5,705	7,756	-2,777
1939.....	319	2,189	2,434	211	5,668	5,104	695	673	941	6,657	8,966	-3,862
1940.....	348	2,125	3,178	242	5,893	5,265	907	891	1,041	6,343	9,182	-3,918
1941.....	392	3,470	3,892	242	7,996	7,227	3,393	2,313	1,111	6,024	13,387	-6,159
1942.....	389	7,960	5,033	295	13,677	12,696	14,326	8,580	1,260	10,021	34,187	-21,490
1943.....	324	16,094	6,050	934	23,402	22,202	42,526	20,888	1,808	14,400	79,622	-57,420
1944.....	431	34,655	7,030	3,325	45,441	43,892	49,438	26,538	2,609	16,730	95,315	-51,423
1945.....	355	35,173	8,729	3,493	47,750	44,762	50,490	30,407	3,617	14,549	98,703	-53,941
1946.....	435	30,885	9,426	3,492	44,238	40,027	27,987	15,161	4,722	12,833	60,703	-20,676
1947.....	494	29,305	10,074	4,635	44,508	40,043	9,172	5,997	4,958	19,562	39,289	+754
1948.....	422	31,171	10,682	3,824	46,099	42,211	7,698	4,285	5,211	16,597	33,791	+8419
1949.....	384	29,482	10,825	2,082	42,773	38,246	7,862	4,435	5,339	20,730	40,057	-1,811
1950.....	423	28,263	11,186	1,439	41,311	37,045	5,789	4,130	5,750	20,977	40,167	-3,122

¹ Beginning 1932, tonnage tax incl. in "Other receipts." ² Net receipts equal total receipts less (a) appropriations to federal old-age and survivors' insurance trust fund beginning fiscal year 1937 and (b) refunds of receipts beginning fiscal year 1931. ³ Formerly War Department. ⁴ Includes Air Force: 1949-\$1,690,460,724; 1950-\$3,620,632,580.

Summary of Internal Revenue Collections

(in millions of dollars)

Source: U. S. Treasury Department.

Fiscal year ending	1939	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Total internal revenue collections.....	5,162	7,352	13,030	22,369	40,120	43,800	40,672	39,108	41,865	40,463	38,957
Total income and profits taxes.....	2,185	3,471	8,007	16,299	33,028	35,062	31,258	29,020	31,172	29,605	28,008
Individual.....	1,029	1,418	3,263	6,630	18,261	19,034	18,705	19,343	20,998	18,052	17,153
Corporation income and excess profits.....	1,156	2,053	4,744	9,669	14,767	16,028	12,553	9,676	10,174	11,554	10,854
Total employment taxes	740	926	1,185	1,499	1,738	1,779	1,701	2,024	2,381	2,476	2,645
Social Security taxes:											
Old-age insurance...	530	687	895	1,132	1,290	1,308	1,238	1,459	1,613	1,687	1,873
Unemployment insurance.....	101	101	120	156	183	186	179	186	209	226	223
Railroad retirement...	109	138	170	211	265	285	284	380	560	563	548
Total miscellaneous internal revenue.....	2,237	2,955	3,838	4,571	5,353	6,960	7,713	8,064	8,311	8,382	8,305
Capital stock tax.....	127	167	282	329	381	372	352	2	2	6	(1)
Estate and gift taxes...	361	407	433	447	511	643	677	779	899	797	706
Alcoholic beverage taxes.....	588	820	1,048	1,423	1,618	2,310	2,526	2,475	2,255	2,211	2,219
Tobacco taxes.....	580	698	781	924	988	932	1,166	1,238	1,300	1,322	1,328
Stamp taxes.....	41	39	42	45	51	66	88	80	79	73	85
Manufacturers' and retailers' excise taxes.....	397	617	852	670	729	1,207	1,415	1,940	2,119	2,221	2,245
Miscellaneous taxes....	144	207	401	732	1,075	1,430	1,490	1,551	1,656	1,753	1,721

¹ Less than 1.

State Revenues and Expenditures

(in millions of dollars)

Source: U. S. Bureau of the Census.

	1940	1949
Total revenues.....	5,145	10,991
Total expenditures*.....	5,421	11,782
Operation.....	1,745	4,972
Aid paid to local governments.....	1,627	3,544
Contributions to trust funds and state enterprises.....	900	1,136

* Includes provision for debt retirement and interest payments.

Tax Revenues

(in millions of dollars)

Source: The Conference Board; Bureau of the Census.

Fiscal year	Total	Federal	State	Local
1916.....	2,643	708	364	1,571
1920.....	9,165	5,689	636	2,840
1925.....	7,892	2,974	1,107	3,811
1930.....	10,277	3,479	1,780	5,018
1935.....	9,736	3,551	1,886	4,299
1940.....	12,907	4,910	3,313	4,684
1945.....	53,048	42,601	5,603	4,844
1948.....	54,495	40,104	7,791	6,601
1949.....	53,586	37,810	8,349	7,427

Distribution of State Employment:

April, 1950

Source: U. S. Department of Commerce.

Function	Employees (in thousands)	Pay roll (in millions)
General govt. functions.....	1,015	\$208.3
General control.....	78	18.4
Public safety.....	57	14.6
Police.....	17	4.4
Highways.....	171	35.4
Natural resources.....	69	14.5
Health.....	27	5.9
Hospitals & institutions for the handicapped.....	172	31.2
Public welfare.....	39	7.5
Correction.....	32	7.6
Schools.....	309	58.8
Employment security adminis- tration.....	50	12.0
Other general government.....	12	2.4
State enterprises.....	18	3.9
Alcoholic-beverage monopoly systems.....	13	2.7
Other.....	5	1.2
Total.....	1,033	212.2

HOW WE WORK

Despite pessimistic predictions with respect to postwar employment, for three years following V-J Day there was almost complete employment. The last quarter of 1948 saw the first slide in employment and the index of joblessness continued to mount until the early summer of 1949. At that point there was a leveling off and gradual improvement.

The outbreak of war in Korea found us with practically full employment. Contrary to our position at the beginning of World War II, there was practically no pool of unemployed, and there were much smaller reserves of employable women, aged persons, and handicapped workers. Manpower loomed as one of the big problems in this country's new mobilization effort.

Productivity in Selected Industries

(1939 = 100)

Source: U. S. Bureau of Labor Statistics.

Industry	Output per worker					Output per man-hour				
	1940	1945	1946	1947	1948	1940	1945	1946	1947	1948
Manufacturing										
Beet sugar.....	103.3	75.2	90.6	100.7	.....	103.9	78.7	89.4	98.2	.....
Bread and other bakery products.....	.....	120.5	119.7	109.0	.....	.....	110.2	111.7	106.9	.....
Cane-sugar refining.....	103.9	100.4	87.1	99.7	.....	103.9	85.2	82.3	86.4	.....
Canning and preserving.....	106.7	112.9	126.5	118.6	.....	108.7	104.7	114.2	110.5	.....
Cement.....	101.1	108.5	120.3	121.0	.....	100.4	90.1	108.7	110.8	.....
Clay-construction products.....	100.4	91.6	109.9	110.8	118.3	105.2	87.4	104.4	105.1	111.5
Coke.....	105.6	104.7	99.4	109.4	.....	104.4	100.5	97.0	105.2	.....
Confectionery.....	107.4	120.1	122.8	114.5	.....	107.4	111.6	117.4	109.3	.....
Fertilizer.....	103.5	120.9	129.0	130.0	.....	104.7	96.0	109.7	112.5	.....
Flour and other grain-mill products.....	97.7	97.6	90.7	99.4	.....	99.8	83.4	79.3	85.6	.....
Footwear (except rubber).....	99.8	126.0	126.0	114.3	.....	104.1	111.3	116.3	106.6	.....
Glass products.....	104.1	113.5	108.3	113.3	.....	103.4	97.6	98.1	102.3	.....
Leather.....	98.3	136.1	123.5	126.6	.....	101.2	116.3	116.6	120.1	.....
Malt liquors.....	97.8	105.1	97.2	96.5	.....	97.8	88.3	88.0	85.3	.....
Milk—condensed and evaporated.....	105.4	97.7	93.6	87.5	.....	103.3	85.5	86.3	82.1	.....
Nonferrous metals: primary smelters.....	105.2	106.0	91.1	101.1	.....	103.5	88.6	85.3	93.5	.....
Rayon and synthetic fibers.....	116.7	189.0	190.6	215.7	245.5	113.4	170.2	184.7	207.6	236.2
Tobacco products.....	102.8	138.1	129.2	127.1	.....	101.0	117.9	116.5	117.2	.....
Mining										
Anthracite coal.....	96.7	130.1	127.0	123.2	121.2	98.5	89.2	93.5	90.5	90.5
Bituminous coal.....	104.2	148.4	141.6	147.6	136.6	104.0	105.7	109.7	112.1	111.7
Copper.....	106.6	161.1	137.3	161.7	153.4	107.2	151.0	134.3	151.2	142.2
Iron.....	126.6	135.3	110.8	120.8	.....	117.4	110.5	104.9	107.5	.....
Lead and zinc.....	98.2	105.3	91.7	97.0	.....	96.4	92.0	85.1	90.9	.....
Electric light and power.....	108.9	200.5	168.8	177.1	180.5	108.6	182.5	160.7	167.0	171.0
Steam railroads*.....	106.5	155.2	136.1	142.0	140.0	105.2	139.5	129.1	135.0	133.3
Telephone.....	103.9	110.5	100.9	101.8	.....	103.0	98.8	94.8	101.1	.....
Telegraph.....	92.5	116.4	109.6	119.5	.....	104.0	175.5	191.2	195.4	.....

* Revenue traffic.

Age of Persons
in the Labor Force
(in thousands)

Source: U. S. Department of Commerce.

Age	1940*				1950†			
	Male	%	Female	%	Male	%	Female	%
14 to 19.....	2,619	7	1,395	11	4,062	9	2,378	13
20 to 24.....	5,035	12	2,688	21	4,865	11	2,489	13
25 to 44.....	18,817	47	6,107	47	20,421	45	8,181	44
45 to 64.....	11,954	29	2,550	19	13,905	30	5,082	27
Over 65.....	1,859	5	275	2	2,457	5	589	3
Total.....	40,284	100	13,015	100	45,710	100	18,719	100

* Week of March 24.

† Week of July 2.

Selected Occupation Groups (1950)
(in thousands)

Source: U. S. Bureau of the Census.

Occupation	Male	Female
Professional & semiprofessional workers.....	2,554	1,659
Farmers & farm managers.....	4,326	277
Proprietors, managers, & officials exc. farm.....	5,463	1,075
Clerical & kindred workers.....	3,112	4,608
Salesmen & saleswomen.....	2,385	1,412
Operatives & kindred workers.....	7,758	205
Craftsmen, foremen, & kindred workers.....	8,993	3,238
Domestic service workers.....	196	1,729
Service workers, exc. domestic.....	2,472	2,168
Farm laborers & foremen.....	2,480	1,182
Laborers, exc. farm & mine.....	3,846	80
Total employed.....	43,582	17,632

U. S. Labor Force, 1940 (in thousands)

Source: U. S. Department of Commerce.

All occupations.....	52,020
Professional and semiprofessional workers.....	3,558
Actors and actresses.....	19
Architects.....	22
Artists and art teachers.....	62
Authors, editors, and reporters.....	78
Chemists, assayers, and metallurgists.....	60
Clergymen.....	140
College presidents, professors, and instructors.....	76
Dentists.....	71
Engineers.....	262
Lawyers and judges.....	180
Musicians and music teachers.....	162
Osteopaths.....	6
Pharmacists.....	83
Physicians and surgeons.....	166
Social and welfare workers.....	75
Teachers, not elsewhere classified.....	1,076
Trained nurses and student nurses.....	371
Veterinarians.....	11
Librarians.....	39
Dancers, showmen, and athletes.....	54
Designers and draftsmen.....	112
Aviators.....	6
Chiropractors.....	11
Optometrists.....	10
Photographers.....	38
Radio and wireless operators.....	12
Religious workers.....	35
Surveyors.....	16
Lab. technicians & assistants.....	67
Farmers and farm managers.....	5,303
Proprietors, managers, and officials, excl. farms.....	3,854
Postmasters, and misc. gov't officials.....	240
Clerical, sales, and kindred workers.....	8,270
Bookkeepers, accountants, and cashiers.....	931
Stenographers, typists, and secretaries.....	1,175
Insurance agents and brokers.....	249
Traveling salesmen and sales agents.....	633
Craftsmen, foremen, and kindred workers.....	5,952
Carpenters.....	766

Electricians.....	227
Foremen, not elsewhere classified.....	576
Machinists, millwrights, and tool makers.....	662
Mechanics and repairmen.....	974
Painters, paperhangers, and glaziers.....	480
Operatives and kindred workers.....	9,477
Domestic service workers.....	2,349
Protective service workers.....	715
Guards & watchmen.....	236
Firemen, fire department.....	79
Policemen, sheriffs, and marshals.....	177
Service workers, except domestic and protective.....	3,116
Barbers, beauticians, and manicurists.....	440
Charwomen, janitors, and porters.....	631
Waiters and bartenders.....	733
Cooks, except family.....	336
Elevator operators.....	85
Practical nurses & midwives.....	109
Boarding house keepers.....	112
Farm laborers and foremen.....	3,531
Laborers, excl. farm and mine.....	4,612

Women Workers (in thousands)

Source: U. S. Bureau of the Census.

Note: Data prior to 1940 refers to gainful workers, not strictly comparable with current figures.

	Female workers	Total workers	Female workers as % of total
1900.....	5,114	28,283	18.1
1910.....	7,789	37,271	20.9
1920.....	8,430	41,236	20.4
1930.....	10,679	48,595	22.0
1940.....	14,160	55,640	25.4
1943.....	18,700	55,540	33.7
1944.....	19,170	54,630	35.1
1945.....	19,030	53,860	35.3
1946.....	16,780	57,520	29.2
1947.....	16,896	60,168	28.1
1948.....	17,583	61,442	28.6
1949.....	17,049	62,105	27.5
1950*.....	17,982	61,942	29.0

* Average first 5 months.

Minutes of Working Time Required for Purchase Per Pound of Selected Foods

Source: U. S. Bureau of Labor Statistics.

Food	United States Mar. 1949	Chile Dec. 1948	France Apr. 1949	Germany May 1949	Great Britain May 1949	Italy Mar. 1949	Sweden Feb. 1949	U.S.S.R. Apr. 1949
Flour, wheat.....	4	13	20	12	5	22	8	52
Pastes (spaghetti, macaroni).....	8	...	35	...	21	14 ¹	...	78
Rice.....	8	18	40	...	17	21	...	145
Bread.....	6	16	10	9	5	17	11	25
Beef, average.....	29	...	...	...	...	136	33	254
Pork, chops.....	32	...	108 ²	...	29	133	54	407
Lamb, leg.....	30	83 ³	124	...	45	...	73 ⁴	288 ⁵
Chickens.....	26	...	...	218	...	...	49	305
Fish.....	19	...	41 ⁶	...	...	74	19	294 ⁶
Butter.....	32	182	146	120	34	222	58	542
Cheese.....	26	103	122	85	25	151	36	...
Milk, fresh (grocery) ⁷	9	23	22	...	16	28	8	59
Eggs ⁸	27	122	106	298	57	112	55	158
Fresh apples.....	7	...	...	51	...	...	20	141
Cabbage.....	4	3	...	5	...	...	3	9 ⁹
Potatoes.....	2	6	3	4	3	6	2	6 ⁹
Dried navy beans.....	7	18 ¹⁰	32	...	21	18 ¹⁰	...	...
Coffee.....	23	88	124	640	76	191	62	706
Tea.....	56	241	...	...	72	...	...	1,506
Lard.....	9	102	56	...	23	108	...	...
Sugar.....	4	15	27	27	10	46	9	141

¹ Corn meal. U. S. working time 4 minutes. ² Loin. ³ Lamb average. ⁴ Steak. ⁵ Cod, salted. ⁶ Herring, salted.
⁷ Quart. ⁸ Dozen. ⁹ Prices for Nov., 1948. ¹⁰ Kidney beans. U. S. time 8 minutes.

Employment and Unemployment

(in millions of persons)

Sources: U. S. Bureau of Labor Statistics, U. S. Bureau of the Census, and U. S. Bureau of Agricultural Economics.

Note: Data prior to 1940 estimated by Research Institute of America from various Government sources.

Activity	1929	1932	1941	1943	1944	1945	1946	1947	1948	1949	1950 ¹
Total employment.....	46.7	37.9	50.4	54.5	54.0	52.8	55.2	58.0	59.4	58.7	58.0
Non-agricultural employment.....	36.8	26.3	41.3	45.4	45.0	44.2	46.9	49.8	51.4	50.7	51.1
Manufacturing.....	10.5	6.8	13.0	17.4	17.0	15.2	14.5	15.2	15.3	14.2	14.1
Durable goods.....	...	...	...	6.5	6.3	6.3	6.8	8.3	8.3	7.5	7.5
Nondurable goods.....	...	...	...	10.9	10.7	8.9	7.7	6.9	7.0	6.7	6.6
Mining.....	1.1	.7	.9	.9	.9	.8	.9	.9	1.0	.9	.8
Construction.....	1.5	1.0	1.8	1.6	1.1	1.1	1.7	2.0	2.2	2.2	2.0
Transportation and public utilities.....	3.9	2.8	3.2	3.6	3.8	3.9	4.0	4.1	4.2	4.0	3.9
Trade.....	6.4	4.9	7.6	7.3	7.4	7.7	9.0	9.2	9.5	9.4	9.2
Retail.....	...	...	...	5.7	5.7	5.9	7.0	6.8	7.0	6.9	6.8
Wholesale.....	...	...	...	1.6	1.7	1.8	2.0	2.4	2.5	2.5	2.5
Finance.....	1.4	1.3	1.5	1.4	1.4	1.4	1.6	1.6	1.7	1.8	1.8
Service.....	3.1	2.7	3.6	3.8	3.8	3.9	4.4	4.8	4.8	4.8	4.7
Government.....	3.1	3.2	4.6	6.0	6.0	6.0	5.6	5.4	5.6	5.8	5.8
Other, self-employed, domestic.....	6.9	5.1	5.1	3.4	3.6	4.2	5.2	6.6	7.1	7.6	8.8
Agricultural employment.....	9.9	9.6	9.1	9.1	9.0	8.6	8.3	8.2	8.0	8.0	6.9
Unemployment.....	2.0	12.7	5.5	1.1	.7	1.1	2.3	2.2	2.0	3.4	3.9
Public works.....	...	...	1.9	(²)	...	...	...	...	...	...	...
Total civilian labor force.....	48.7	50.6	55.9	55.5	54.6	53.9	57.5	60.2	61.4	62.1	61.9
Armed forces.....	.3	.3	1.5	8.9	11.3	11.3	3.3	1.4	1.3	1.5	1.4
Total labor force.....	49.0	50.9	57.4	64.4	65.9	65.2	60.8	61.6	62.7	63.6	63.3

¹ Average of first 5 months not adjusted for seasonal variation. ² Negligible.

Labor Turnover in Manufacturing Establishments

(Monthly Average Rate Per 100 Employees)

Source: U. S. Bureau of Labor Statistics.

	1929*	1932	1933	1937	1941	1943	1945	1946	1947	1948	1949	1950†
Accession rate.....	5.7	3.3	5.4	3.6	5.4	7.5	6.3	6.7	5.1	4.4	3.5	3.7
Separation rate.....	6.3	4.3	3.8	4.4	3.9	7.3	8.3	6.1	4.8	4.5	4.3	3.0
Discharges.....	.8	.2	.2	.2	.3	.6	.6	.4	.4	.4	.2	.2
Layoffs.....	2.1	3.5	2.7	3.0	1.3	.6	2.3	1.2	.9	1.3	2.4	1.4
Quits.....	3.4	.7	.9	1.3	2.0	5.2	5.1	4.3	3.4	2.8	1.5	1.2
Miscellaneous†.....	..	..	..	..	.4	.9	.3	.2	.1	.1	.1	.1

* Average for 7 months, June-December. † First 5 months' average.

† Includes separations caused by death, permanent disability, retirement on pension, and extended leave. Beginning September 1940, workers leaving to enter the Army or Navy are included. Prior to January 1940, miscellaneous separations were combined with data for quits.

Disabling Injuries in Industry

(in thousands)

Source: U. S. Bureau of Labor Statistics.

Industry	1936	1941	1944	1946	1947	1948	1949
Manufacturing.....	312	453	787	541	539	469	381
Trade—Wholesale and retail.....	133	297	274	333	361	347	329
Public utilities.....	14	21	19	25	28	27	27
Construction.....	284	500	100	151	152	193	183
Railroads.....	38	48	92	76	72	63	46
Miscellaneous transportation.....	28	130	135	133	135	133	126
Mining and quarrying.....	103	97	92	84	93	87	70
Services, govt. and misc.....	232	368	419	396	382	360	368
Agriculture.....	265	270	312	324	298	340	340
All industries.....	1,407	2,180	2,230	2,063	2,059	2,019	1,870

Strikes and Lockouts

Year	Strikes and lockouts Number	Workers involved Number (thousands)	Man-days idle Number (thousands)
1885.....	695	258	n.a.
1890.....	1,897	373	n.a.
1895.....	1,255	407	n.a.
1900.....	1,839	568	n.a.
1905.....	2,186	302	n.a.
1915.....	1,593	n.a.	n.a.
1917.....	4,450	1,227	n.a.
1919.....	3,630	4,160	n.a.
1920.....	3,411	1,463	n.a.
1921.....	2,385	1,099	n.a.
1922.....	1,112	1,613	n.a.
1923.....	1,553	757	n.a.
1924.....	1,249	655	n.a.
1925.....	1,301	428	n.a.
1926.....	1,035	330	n.a.
1927.....	707	330	26,219
1928.....	604	314	12,632
1929.....	921	289	5,352
1930.....	637	183	3,317
1931.....	810	342	6,893
1932.....	841	324	10,502
1933.....	1,695	1,168	16,872
1934.....	1,856	1,467	19,592
1935.....	2,014	1,117	15,456
1936.....	2,172	789	13,902
1937.....	4,740	1,861	28,425
1938.....	2,772	688	9,148
1939.....	2,613	1,171	17,812
1940.....	2,508	577	6,701
1941.....	4,288	2,363	23,048
1942.....	2,968	840	4,183
1943.....	3,752	1,981	13,501
1944.....	4,956	2,116	8,721
1945.....	4,750	3,467	38,025
1946.....	4,985	4,600	116,000
1947.....	3,693	2,170	34,600
1948.....	3,419	1,960	34,100
1949.....	3,606	3,030	50,500
1950*.....	1,970	1,085	23,100

n.a. = not available. *First six months, preliminary.

Why Strikes?

Major issues	Percentage of total strikes		
	1947	1948	1949
Wages and hours.....	46.3	50.8	46.6
Union organization, wages and hours	15.1	9.4	6.0
Union organization.....	14.7	13.4	15.7
Recognition.....	9.9	9.2	10.8
Strengthening bargaining position	.7	.4	.5
Closed or union shop.....	2.0	1.8	2.2
Discrimination.....	1.2	1.3	1.8
Other.....	.9	.7	.4
Other working conditions.....	18.8	21.5	25.0
Job security.....	9.5	10.0	12.6
Shop conditions and policies.....	7.4	9.7	9.7
Work load.....	1.0	1.3	2.1
Other.....	.9	.5	.6
Interunion or intraunion matters.....	4.3	3.8	5.8
Sympathy.....	1.1	1.3	1.4
Union rivalry or factionalism.....	1.5	1.4	1.5
Jurisdiction.....	1.6	1.0	2.6
Not reported.....	.1	.1	.3
Not reported.....	.8	1.1	.9
All issues.....	100.0	100.0	100.0

Termination of Strikes in 1948

Methods of termination	Strikes (per cent of total)	Workers involved (per cent of total)
Agreement of parties reached:		
Directly.....	54.4	25.4
Assisted by impartial chairman.....	.7	.2
Assisted by government agencies.....	24.6	37.2
Terminated without formal settlement	16.6	36.4
Employers discontinued business.....	1.3	.1
Not reported.....	2.2	.7

Sources: U. S. Bureau of Labor Statistics.

WHAT WE EARN AND SPEND—WHAT LIVING COSTS US

"Who gets the money?" is a favorite topic for political debate and more violent action. This section shows how much different groups in the economy—workers, farmers, professional persons, businessmen—receive of the total national income and how they spend it.

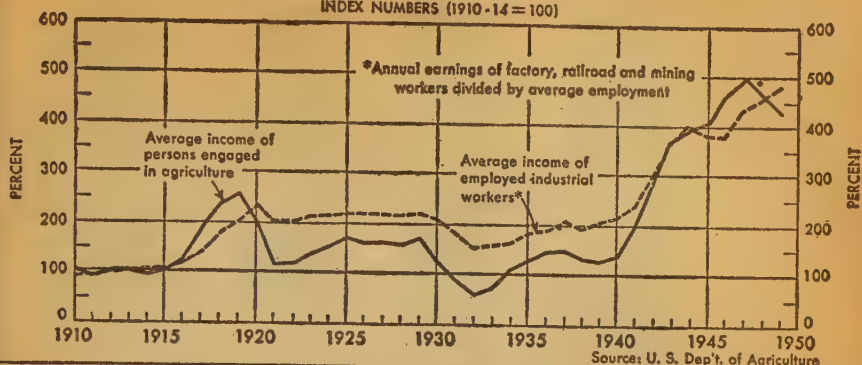
Over the long trend the American economy has been characterized by a steady rise in the real income of all groups. These increases have been particularly pronounced during the war years, as shown by the fact that 46 per cent of all families have incomes of \$3,000 or more against 6.3 per cent in 1935-36. Higher production made possible by greater capital investment per wage earner and greater production efficiency has enabled us to achieve this steady improvement. Thanks to steadily rising farm prices, farm income scored the most notable advances during recent years.

The increase in money incomes, however, does not tell the full story. Along with wages and other earnings, prices too have soared, as they always do in periods of war activity. While cost of living had soared almost 75 per cent since 1939, farm prices and raw material costs had more than doubled during the same period. Contrary to the experience in previous postwar periods, hopes that the first weakening of prices in the fall of 1948 would lead to a gradual return to more normal levels were dashed when all indices started a new upward climb by mid-1950.

The crucial thing, however, is how each of us fared on the basis of comparing the increase in our own income with the higher cost of living. In these terms, higher prices have only slowed down, not cancelled out our steady progress to greater economic well being. The greatest relative increase in income went to the farmer, the under-dog of yesterday.

AVERAGE INCOME OF AGRICULTURAL AND INDUSTRIAL WORKERS, UNITED STATES, 1910-49

INDEX NUMBERS (1910-14 = 100)



Average Earnings and Hours Worked Per Week in Nonmanufacturing Industries

Source: U. S. Department of Labor.

Industry	1941		1945		1947		1948		1949		1950*	
	Earnings	Hours Worked	Earnings	Hours Worked	Earnings	Hours Worked	Earnings	Hours Worked	Earnings	Hours Worked	Earnings	Hours Worked
Anthracite mining.....	\$27.41	28.1	\$48.98	39.2	\$62.77	37.7	\$66.57	36.8	\$56.78	30.2	\$55.32	28.8
Bituminous coal mining.....	30.86	31.1	52.25	42.3	66.59	40.7	72.12	38.0	63.28	32.6	62.02	31.3
Metalliferous mining.....	33.28	41.7	45.86	44.0	54.63	41.8	60.80	42.4	61.55	40.9	62.95	41.6
Quarrying and nonmetallic mining	26.25	41.8	41.26	46.6	50.54	45.0	55.31	44.5	56.38	43.3	55.07	42.0
Telephone.....	31.95	40.1			44.77	37.4	48.92	39.2	51.78	38.5	53.32	38.6
Telegraph.....			37.98	45.5	53.56	44.6	60.26	44.7	62.85	44.7	63.22	44.2
Electric light and power.....	36.54	39.8	50.05	43.5	56.69	41.9	60.74	41.8	63.99	41.5	65.31	41.4
Street railways and busses.....	35.42	46.5	50.50	51.4	57.14	46.8	61.73	46.1	64.61	44.9	65.29	44.3
Wholesale trade.....	32.32	41.0	44.07	42.7	51.99	41.0	55.58	40.9	57.55	40.7	58.43	40.4
Retail trade.....	21.94	42.5	28.31	40.3	40.66	40.3	43.85	40.3	45.93	40.4	46.39	40.4
Hotels (year-round).....	16.09	45.6	24.53	44.2	29.36	45.2	31.41	44.3	32.84	44.2	33.15	43.8
Laundries.....	19.00	43.3	28.61	43.4	32.71	42.6	34.23	41.9	34.98	41.5	34.95	41.1
Dyeing and cleaning.....	21.70	43.6	32.94	43.3	38.30	41.9	39.50	41.1	40.71	41.2	40.10	40.5
Private building construction.....	35.00	34.7	53.86	39.1	63.13	37.6	68.85	37.3	70.95	36.7	68.98	34.7

* First 4 months average. NOTE: Data prior to 1947 not strictly comparable with that of later years.

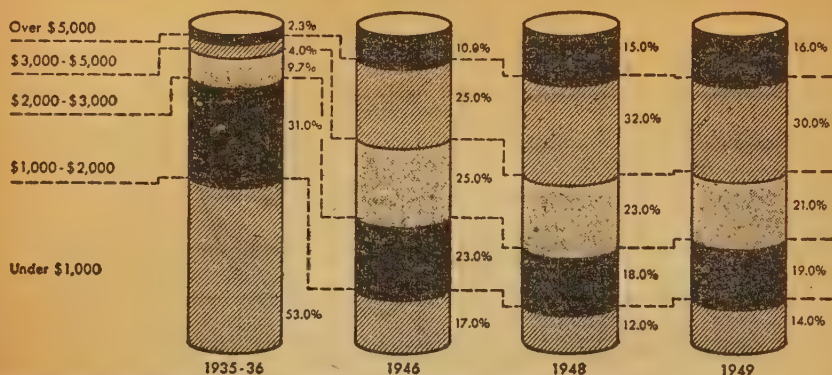
Farm Income—Estimated Receipts from Major Farm Marketings (in millions of dollars)

Source: U. S. Department of Agriculture.

Year	Cotton and cotton-seed	Tobacco	Bread grains	Oil-bearing crops	Feed grains and hay	Vegetables	Fruits and nuts	Meat animals	Dairy products	Poultry & eggs
1919.....	2,282	500	1,746	96	1,173	619	642	4,046	1,522	1,111
1929.....	1,512	279	790	85	706	710	620	3,016	1,838	1,188
1932.....	461	115	220	31	235	358	327	1,159	986	562
1939.....	627	271	475	112	477	589	443	2,272	1,346	768
1941.....	1,045	323	756	232	594	730	613	3,246	1,897	1,107
1944.....	1,497	689	1,328	588	1,194	1,567	1,504	5,720	2,949	2,306
1945.....	1,199	898	1,525	610	1,431	1,668	1,479	5,907	3,063	2,784
1946.....	1,462	955	1,826	711	1,629	1,883	1,796	7,045	3,736	2,693
1947.....	2,243	1,030	2,789	984	2,286	1,939	1,352	9,319	4,059	2,901
1948.....	2,567	945	2,704	1,042	2,101	1,989	1,161	9,360	4,441	3,075
1949.....	2,637	904	2,346	800	2,198	1,817	1,123	8,395	3,781	3,038
1950*.....	341	213	353	341	845	467	355	3,213	1,552	931

* First 5 months.

DISTRIBUTION OF INCOME OF FAMILIES AND SINGLE CONSUMERS



SOURCE: NATURAL RESOURCES COMMITTEE, U. S. BUREAU OF LABOR STATISTICS, AND FEDERAL RESERVE BOARD

Average Earnings and Hours Worked Per Week
in Manufacturing Industries

Source: U. S. Department of Labor.

Industry	1939		1945		1946		1947		1949		1950 ²	
	Earn- ings	Hours worked	Earn- ings	Hours worked	Earn- ings	Hours worked	Earn- ings	Hours worked	Earn- ings	Hours worked	Earn- ings	Hours worked
All manufacturing ¹	\$24.23	37.7	\$45.08	43.4	\$49.97	40.4	\$54.14	40.1	\$54.92	39.2	\$56.52	39.7
Durable goods.....	26.90	38.0	49.81	44.1	52.46	40.6	57.11	40.5	58.03	39.5	59.93	40.3
Primary metal industries.....	n.a.	n.a.	n.a.	n.a.	55.24	39.8	61.03	40.1	60.78	38.3	63.67	39.6
Iron and steel foundries.....	n.a.	n.a.	n.a.	n.a.	54.80	41.2	58.45	40.7	55.09	37.2	50.12	39.7
Nonferrous foundries.....	n.a.	n.a.	n.a.	n.a.	54.92	40.0	59.96	40.0	60.92	39.0	63.31	40.1
Fabricated metal products.....	n.a.	n.a.	n.a.	n.a.	52.06	40.8	56.68	40.6	57.82	39.6	59.96	40.4
Hand tools.....	n.a.	n.a.	n.a.	n.a.	51.66	41.2	56.07	40.9	54.54	38.6	56.27	39.4
Hardware.....	n.a.	n.a.	n.a.	n.a.	49.45	41.5	54.26	40.4	56.28	39.3	60.84	41.3
Structural metal products.....	n.a.	n.a.	n.a.	n.a.	53.57	41.3	58.17	41.2	59.90	40.5	60.28	40.2
Electrical machinery.....	27.50	38.6	47.15	44.1	51.26	40.3	55.66	40.1	56.96	39.5	58.65	40.6
Machinery, except electrical.....	29.27	39.3	53.02	45.8	55.89	41.4	60.52	41.2	60.44	39.5	62.95	40.4
Transportation equipment ³	30.51	38.9	56.10	43.7	58.87	39.3	61.58	39.0	64.95	39.2	68.15	40.2
Automobiles.....	32.91	35.4	51.99	41.3	57.45	39.0	61.86	38.4	65.97	38.9	70.18	40.8
Lumber and wood products.....	n.a.	n.a.	n.a.	n.a.	47.36	41.8	51.38	41.5	51.72	40.6	50.98	40.0
Furniture & fixtures.....	n.a.	n.a.	n.a.	n.a.	45.64	41.6	48.99	41.1	49.48	40.1	51.91	41.5
Stone, clay and glass.....	24.30	37.6	40.60	43.1	49.07	41.1	53.46	40.9	54.45	39.8	55.73	40.0
Nondurable goods.....	22.11	37.4	38.87	42.4	46.96	40.1	50.61	39.6	51.41	38.8	52.80	39.1
Textile—mill products.....	17.09	36.6	31.56	41.1	41.26	39.6	45.59	39.2	44.83	37.7	47.05	39.0
Cotton, silk, synthetic fibers ⁴	14.47	36.7	28.62	41.3	40.30	40.1	44.36	39.4	42.89	37.2	46.43	39.7
Woolen and worsted goods.....	19.50	36.4	36.81	41.6	46.28	40.0	52.45	40.1	51.19	38.9	51.86	39.2
Apparel and other finished textiles.....	18.44	34.5	32.15	36.9	40.84	36.3	42.79	36.2	41.89	35.8	42.90	36.1
Leather.....	19.42	36.2	35.58	41.1	40.61	38.6	41.66	37.2	41.61	36.6	43.23	37.4
Food.....	24.80	40.3	40.10	44.9	48.82	42.9	51.87	42.0	53.58	41.5	54.37	40.8
Tobacco.....	17.09	35.4	32.27	41.7	35.26	38.7	36.50	38.1	37.25	37.1	38.97	36.6
Paper.....	24.08	40.1	41.11	45.9	50.21	43.1	55.25	42.8	55.96	41.7	57.91	42.4
Printing and publishing.....	32.91	37.4	47.93	41.4	60.75	40.1	66.73	39.3	70.28	38.7	71.41	38.5
Chemicals.....	25.97	39.5	44.66	44.5	51.13	41.5	56.23	41.5	58.63	41.0	60.21	41.2
Petroleum and coal.....	33.11	36.5	56.71	46.2	60.89	40.7	69.23	40.7	72.36	40.4	72.74	40.3
Rubber.....	28.26	36.9	50.28	44.0	55.32	39.8	56.78	39.0	57.79	38.3	60.46	39.5

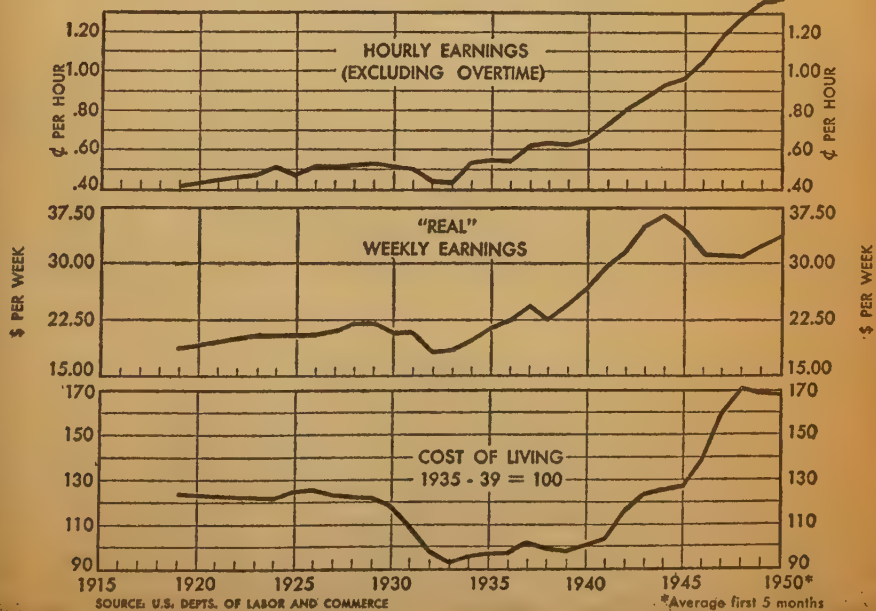
¹ Average weekly earnings in 1919 = \$23.29, 1929 = \$26.40, 1932 = \$17.86. Average hours worked per week in 1914 = 51.0, 1919 = 47.8, 1929 = 45.7, 1932 = 38.2. ² Average of first four months. ³ Figures for 1939 and 1945 exclude automobiles. ⁴ Figures for 1939 and 1945 are for cotton goods only. NOTE: Data prior to 1947 not strictly comparable; partially estimated by Research Institute. Designation n.a. means not available.

National Income by Distributive Shares (in millions of dollars)

Source: U. S. Department of Commerce.

Type of share	1929	1933	1941	1944	1946	1947	1948	1949	% of total, 1949
National income.....	87,355	39,584	103,834	183,838	180,286	198,688	223,466	216,831	100.0
Compensation of employees.....	50,786	29,330	64,280	121,163	117,098	127,988	140,187	140,555	64.8
Wages and salaries.....	50,165	28,825	61,708	116,924	111,227	122,059	134,357	134,172	61.9
Private.....	45,206	23,660	51,537	83,449	90,577	104,803	115,659	113,733	52.5
Military.....	312	270	1,862	20,638	7,962	4,068	3,970	4,324	2.0
Government civilian.....	4,647	4,895	8,309	12,837	12,688	13,188	14,728	16,115	7.4
Supplements to wages and salaries.....	621	595	2,572	4,239	5,871	5,929	5,830	6,383	2.9
Employer contributions for social insurance.....	101	133	1,983	2,937	3,970	3,565	3,061	3,464	1.6
Other labor income.....	520	372	589	1,302	1,901	2,364	2,769	2,919	1.3
Income of unincorporated enterprises and inventory valuation adjustment.....	13,927	5,207	16,504	28,997	35,375	35,365	39,791	34,373	15.8
Business and professional.....	8,262	2,925	9,566	17,156	20,585	19,776	22,116	20,977	9.6
Income of unincorporated enterprises.....	8,120	3,450	10,210	17,226	22,404	21,323	22,510	20,282	9.3
Inventory valuation adjustment.....	142	-525	-644	-70	-1,819	-1,547	-394	695	.3
Farm.....	5,665	2,282	6,938	11,841	14,790	15,589	17,695	13,396	6.2
Rental income of persons.....	5,811	2,018	4,322	6,495	6,620	7,059	7,506	7,330	3.4
Corporate profits and inventory valuation adjustment.....	10,290	-1,981	14,615	24,046	18,271	24,732	31,848	29,858	13.8
Corporate profits before tax.....	9,818	162	17,232	24,333	23,464	30,489	33,880	27,625	12.8
Corporate profits tax liability.....	1,398	524	7,846	13,525	9,583	11,940	12,969	10,601	4.9
Corporate profits after tax.....	8,420	-362	9,386	10,808	13,881	18,549	20,911	17,024	7.9
Dividends.....	5,823	2,066	4,465	4,680	5,808	6,561	7,467	7,821	3.6
Undistributed profits.....	2,597	-2,428	4,921	6,128	8,073	11,988	13,444	9,203	4.3
Inventory valuation adjustment.....	472	-2,143	-2,617	-287	-5,193	-5,757	-2,032	2,233	1.0
Net interest.....	6,541	5,010	4,113	3,137	2,922	3,544	4,134	4,715	2.2

WAGES AND LIVING COSTS



Consumer Income and Spending

Source: U. S. Department of Commerce.

For every \$10 change in consumer income, spending for these goods	Changes up or down by:	For every \$10 change in consumer income, spending for these goods	Changes up or down by:
Durables		Gasoline & oil	5
Radios, phonographs, parts & records.....	\$25	Magazines, newspapers & sheet music.....	5
Pianos & other musical instruments.....	23	Selected Services	
New cars & net purchases of used cars.....	20	Ticket brokers' mark-up on admissions.....	21
Luggage.....	19	Admissions—legitimate theatres & opera.....	19
Jewelry & watches.....	18	Fur storage & repair.....	16
Tools.....	17	Steam railway (except commutation) fares.....	14
Furniture.....	16	Photo developing & printing.....	13
Floor coverings.....	14	Domestic service.....	13
Tires & tubes.....	12	Taxicab—fares & tips.....	12
Books & maps.....	12	Net payments—mutual accidents & sick benefit associations.....	12
Refrigerators, & washing & sewing machines.....	10	Dentists—services.....	9
China, glassware, tableware & utensils.....	7	Telegraph, cable & wireless.....	9
Nondurables		Beauty parlor services.....	8
Purchased meals & beverages—dining cars & buffet cars.....	16	Physicians—services.....	8
Flowers, seeds & potted plants.....	16	Admissions—motion-picture theatres.....	7
Stationery & writing supplies.....	14	Intercity bus—fares.....	7
Clothing & accessories except footwear.....	11	Interest on personal debt.....	6
Purchased meals & beverages—hotels, tips, retail, service & amusement establishments.....	10	Street & electric railway & local bus—fares.....	5
Shoes & other footwear.....	8	Steam railway—commutation fares.....	5
Toilet articles & preparations.....	8	Telephone.....	4
Drug preparations & sundries.....	6	Gas.....	2
Tobacco products & smoking supplies.....	5	Electricity.....	2

Consumer Spending

Source: U. S. Department of Commerce.

Group	(in millions of dollars)									1949
	1929	1932	1939	1941	1945	1946	1947	1948	1949	% of total
Food and tobacco.....	21,374	12,719	21,072	26,476	45,924	53,738	60,483	64,033	62,890	35.2
Clothing, accessories, and jewelry.....	11,018	5,973	8,299	10,483	20,247	22,419	23,144	24,085	22,620	12.6
Personal care.....	1,116	817	1,004	1,208	2,077	2,186	2,261	2,245	2,200	1.2
Housing.....	11,421	8,964	8,940	9,863	12,205	13,047	14,603	16,070	17,203	9.6
Household operation.....	10,509	6,675	9,461	11,724	14,865	19,012	22,717	24,420	23,531	13.2
Medical care and death expenses.....	3,620	2,575	3,386	3,961	5,902	7,015	7,812	8,517	8,990	5.0
Personal business.....	5,221	3,111	3,725	4,099	4,787	5,536	6,232	7,020	7,447	4.2
Transportation.....	7,496	3,924	6,250	8,241	6,694	11,648	14,876	16,856	19,373	10.8
Recreation.....	4,327	2,439	3,446	4,225	6,314	8,934	9,733	10,040	10,184	5.7
Private education and research.....	664	571	623	692	871	1,033	1,316	1,491	1,566	.9
Religious and welfare activities.....	1,196	973	938	1,014	1,572	1,605	1,589	1,740	1,777	1.0
Foreign travel and remittances—net.....	799	467	317	269	1,621	734	804	929	1,051	.6
Total consumer outlay.....	78,761	49,208	67,466	82,225	123,079	146,907	165,570	177,446	178,832	100.0

Income, Expenditures and Savings

(in billions of dollars)

Source: U. S. Department of Commerce.

	1929	1933	1939	1941	1945	1947	1948	1949	1950†
"Real" spendable income*.....	67.3	48.9	70.6	87.5	117.7	106.5	110.0	110.8	117.2
Spendable income.....	82.5	45.2	70.2	92.0	151.1	169.5	188.4	187.4	196.6
Consumer expenditures.....	78.8	46.3	67.5	82.3	123.1	165.6	177.4	178.8	183.5
Consumer savings.....	3.7	-1.2	2.7	9.8	28.0	3.9	10.9	8.6	13.1

* Spendable income adjusted for changes in U. S. Bureau of Labor Statistics Consumer Price Index. † First half, at annual rate, preliminary.

Farm Income (in millions of dollars)

Year	Est. cash income		Government payments	Total cash income
	Crops	Livestock and livestock products		
1919.....	7,674	6,928	...	14,602
1929.....	5,125	6,171	...	11,296
1931.....	2,536	3,835	...	6,371
1932.....	1,997	2,746	...	4,743
1933.....	2,473	2,841	131	5,445
1935.....	2,978	4,108	573	7,659
1937.....	3,948	4,902	367	9,217
1938.....	3,190	4,496	482	8,168
1939.....	3,366	4,511	807	8,684
1940.....	3,471	4,895	766	9,132
1941.....	4,716	6,474	586	11,776
1942.....	6,331	9,058	697	16,086
1943.....	7,980	11,479	672	20,131
1944.....	9,038	11,333	804	21,175
1945.....	9,538	11,979	769	22,286
1946.....	10,851	13,668	800	25,319
1947.....	13,504	16,509	314	30,327
1948.....	13,485	17,061	257	30,803
1949.....	12,566	14,952	186	27,704
1950*.....	3,585	7,029	191	10,805

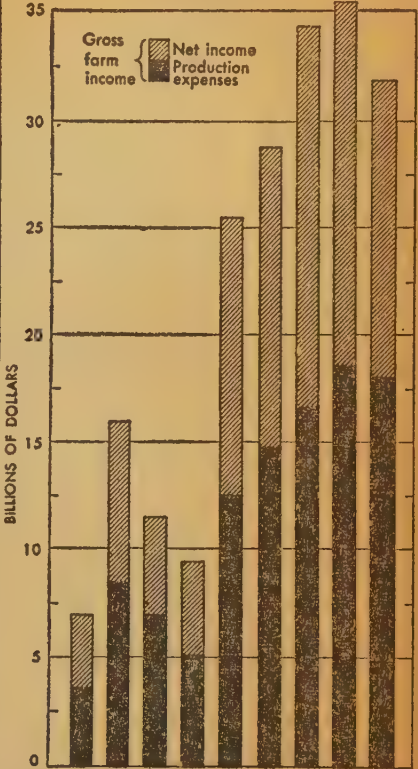
* Total for first 6 months, not adjusted for seasonal variation.

Monthly Farm Wage Rates

Year	Farm wage rates (average)		Year	Farm wage rates (average)	
	With board	Without board		With board	Without board
1910.....	\$21.22	\$28.08	1941.....	\$34.85	\$43.64
1920.....	51.73	65.40	1943.....	61.91	72.51
1922.....	32.75	43.33	1945.....	82.30	95.40
1929.....	40.61	51.22	1947.....	96.00	111.00
1933.....	18.07	25.67	1948.....	100.50	116.25
1937.....	28.00	36.32	1949.....	100.00	†
1939.....	27.39	35.82	1950*.....	95.33	†

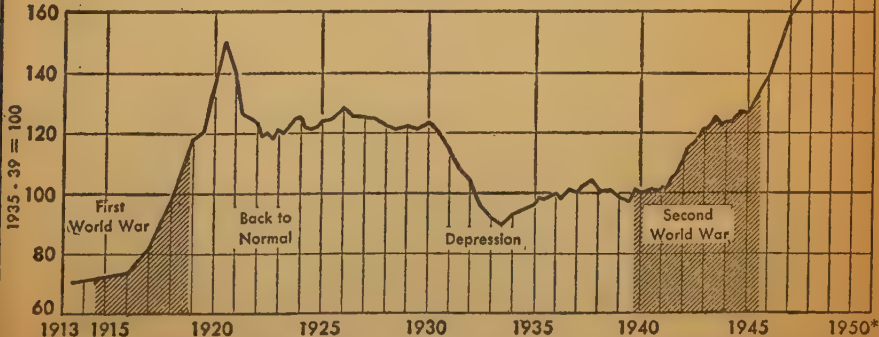
* Average of the first of Jan., April and July. † Break-down discontinued.

GROSS FARM INCOME:
NET INCOME AND PRODUCTION
EXPENSES OF FARM OPERATORS
1910 - 1949



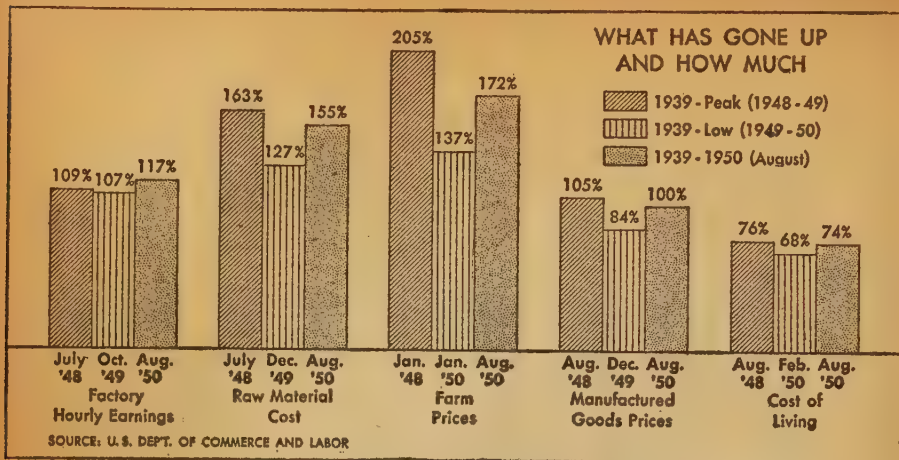
1910 1920 1930 1935 1945 1946 1947 1948 1949
SOURCE: U. S. DEPT. OF AGRICULTURE

COST OF LIVING (ALL ITEMS-AVERAGE FOR LARGE CITIES)



Source: U. S. Dep't of Labor

*Average first 6 months



Consumer Price Index (1935-1939 = 100)

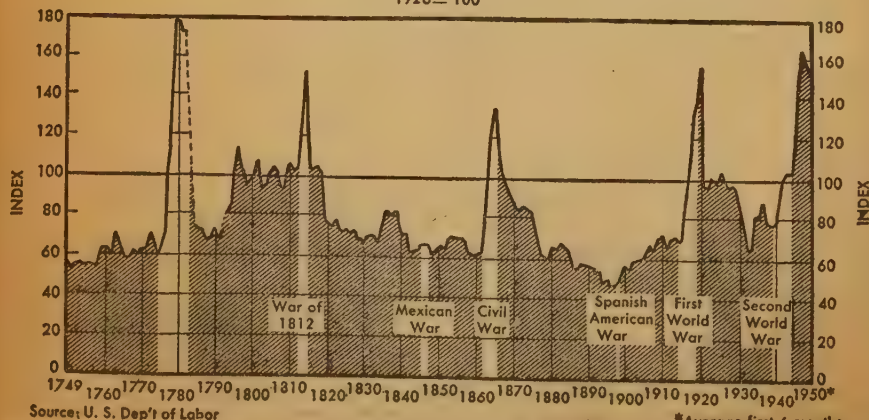
Year	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House furnishings	Miscellaneous*
1929.....	122.5	132.5	115.3	141.4	112.5	111.7	104.6
1932.....	97.6	86.5	90.8	116.9	103.4	85.4	101.7
1937.....	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1939.....	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1941.....	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942.....	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943.....	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944.....	125.5	136.1	138.8	108.2	109.8	136.4	121.3
1945.....	128.4	139.1	145.9	108.3	110.3	145.8	124.1
1946.....	139.3	159.6	160.2	108.6	112.5	159.2	128.9
1947.....	159.2	193.8	185.8	111.2	121.1	184.4	139.9
1948.....	171.2	210.2	198.0	117.4	133.9	195.8	149.9
1949.....	169.1	201.9	190.1	120.8	137.5	189.0	154.6
1950†.....	168.4	199.7	185.0	123.2	140.0	185.4	155.3

* Includes transportation, medical care, household operation, recreation, personal care.

† Average for first 7 months.

WHOLESALE PRICES All Commodities—Yearly Average

1926 = 100



Average Retail Prices of Principal Food Items

Source: U. S. Department of Labor.

Prices in cents per pound except for milk (cents per quart), eggs and oranges (cents per dozen), and tomatoes (cents per No. 2 can).

Item	1913	1920	1922	1929	1932	1941	1943	1944	1946	1947	1948	1949	1950†
Wheat flour.....	3.3	8.1	5.1	5.1	3.2	4.5	6.1	6.5	7.1	9.6	9.8	9.6	9.7
Corn meal.....	3.0	6.5	3.9	5.3	3.6	4.3	5.6	6.2	7.5	9.8	10.9	9.1	8.5
Bread, white.....	5.6	11.5	8.7	8.8	7.0	8.1	8.9	8.8	10.4	12.5	13.9	14.0	14.0
Round steak.....	22.3	39.5	32.3	46.0	29.7	39.1	43.9	41.4	50.1*	75.6	90.5	85.3	86.9
Chuck roast.....	16.0	26.2	19.2	31.4	18.5	25.5	30.2	28.8	35.3*	51.5	64.4	55.5	56.2
Pork chops.....	21.0	42.3	33.0	37.5	21.5	34.3	40.3	37.3	46.0*	72.2	77.2	74.3	68.9
Bacon, sliced.....	27.0	52.3	39.8	43.9	24.2	34.3	56.2	41.1	51.3*	77.7	76.9	66.5	59.1
Ham, whole.....	...	...	...	...	...	30.4	37.7	35.4	45.6*	67.5	68.0	63.4	58.0
Lamb, leg.....	18.9	39.3	36.6	40.2	23.8	29.7	40.3	40.0	47.2*	64.2	71.2	72.5	71.1
Butter.....	38.3	70.1	47.9	55.5	27.8	41.1	52.7	50.0	71.0	80.5	86.7	72.5	72.6
Cheese.....	22.1	41.6	32.9	39.5	24.4	30.0	37.4	36.1	50.1	59.1	65.6	56.2	51.9
Milk, fresh (delivered).....	8.9	16.7	13.1	14.4	10.7	13.6	15.5	15.6	17.6	19.6	21.8	21.1	20.2
Eggs.....	34.5	68.1	44.4	52.7	30.2	39.7	57.2	54.5	58.6	69.5	72.3	69.6	51.1
Bananas.....	...	12.6	10.3	9.7	6.5	7.2	11.7	11.3	11.6	15.1	16.0	16.6	16.7
Oranges.....	...	63.2	57.4	44.7	30.2	31.0	44.3	46.0	50.0	43.4	44.7	51.8	48.2
Cabbage.....	...	6.4	4.6	5.3	4.1	4.2	7.1	5.3	5.9	7.3	6.6	6.7	6.6
Onions.....	...	7.1	7.9	6.7	5.0	5.0	7.5	6.9	6.9	7.3	10.6	7.4	7.1
Potatoes.....	1.7	6.3	2.8	3.2	1.7	2.4	4.6	4.7	4.7	5.0	5.6	5.5	4.8
Tomatoes.....	...	14.8	13.4	12.8	9.3	9.1	15.0	12.0	15.0	19.3	16.5	15.2	14.3
Prunes, dried.....	...	28.1	20.1	15.3	9.2	9.8	16.6	17.0	19.1	24.7	21.4	23.1	23.8
Coffee.....	29.8	47.0	36.1	47.9	29.4	23.6	30.0	30.1	34.4	46.9	51.4	55.4	76.3
Lard.....	15.8	29.5	17.0	18.1	8.7	12.7	19.0	18.7	26.3	31.5	29.6	19.2	16.6
Sugar.....	5.5	19.4	7.3	6.4	5.0	5.7	6.8	6.8	7.7	9.7	9.4	9.5	9.5

* Average of 10 months only; prices not computed for Sept. and Oct. † Average of first five months.

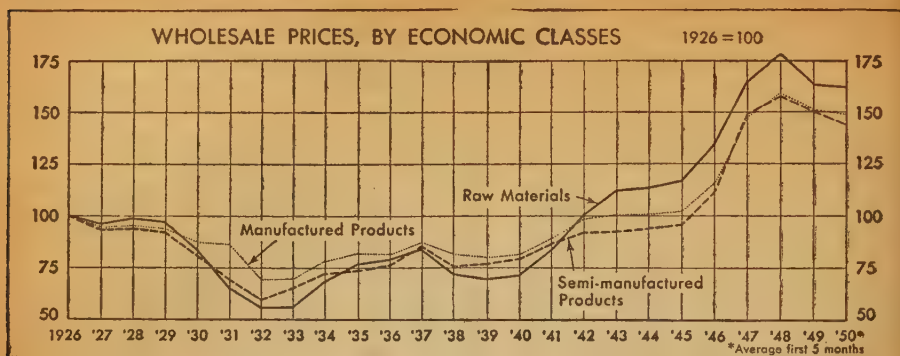
Wholesale Price Indexes by Major Commodity Groups (1926 = 100)

Source: U. S. Bureau of Labor Statistics.

Year	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House furnishing goods	Miscellaneous*
890.....	56.2	50.4	55.5	47.5	57.8	38.1	105.3	46.5	73.2	49.9	97.9
900.....	56.1	50.5	50.8	49.4	53.3	46.3	98.0	46.2	82.1	48.9	102.0
910.....	70.4	74.3	64.9	60.2	58.4	47.6	85.2	55.3	82.0	54.0	152.7
915.....	69.5	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9
917.....	117.5	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1
918.....	131.3	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4
919.....	138.6	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1
920.....	154.4	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5
921.....	97.6	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2
922.....	96.7	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8
929.....	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6
932.....	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4
937.....	86.3	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8
939.....	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8
940.....	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3
941.....	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0
942.....	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7
943.....	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2
944.....	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6
945.....	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7
946.....	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3
947.....	152.1	181.2	168.7	182.4	141.7	108.7	145.0	179.7	127.3	131.1	115.5
948.....	165.1	188.3	179.1	188.8	149.8	134.2	163.6	199.1	135.7	144.5	120.5
949.....	155.0	165.6	161.6	180.4	140.4	131.7	170.2	193.3	118.6	145.2	112.3
950†.....	153.1	159.4	156.4	179.7	137.3	131.5	168.8	194.3	116.1	145.4	111.6

* Includes automobile tires and tubes, paper and pulp, crude rubber and others.

† Average for first 5 months.



Farm Prices and Parity Prices

Source: U. S. Bureau of Agricultural Economics.

Product	Price received	Parity price*	Actual price as % of parity price
Wheat (bushel).....	\$ 1.93	\$ 2.21	87.3%
Rye (bushel).....	1.21	1.71	70.8
Rice (bushel).....	1.91	1.88	101.6
Corn (bushel).....	1.34	1.36	98.5
Oats (bushel).....	.80	.95	84.2
Barley (bushel).....	1.12	1.47	76.2
Sorghum grain (100 pounds)...	1.93	2.87	67.2
Hay (ton).....	20.80	22.20	93.7
Cotton (pound).....	.30	.31	96.4
Cottonseed (ton).....	46.20	67.10	68.8
Soybeans (bushel).....	2.80	2.55	109.8
Peanuts (pound).....	.11	.12	90.0
Flaxseed (bushel).....	3.68	4.36	84.4
Potatoes (bushel).....	1.27	1.75	72.6
Sweet potatoes (bushel).....	2.11	2.35	89.8
Apples (bushel).....	2.62	2.65	98.8
Oranges on tree (box).....	1.85	3.57	51.8
Hogs (hundredweight).....	17.80	19.20	92.7
Beef cattle (hundredweight)....	23.70	17.30	136.9
Veal calves (hundredweight)...	25.90	19.40	133.5
Lambs (hundredweight).....	24.80	19.10	129.8
Butterfat (pound).....	.60	.71	84.5
Milk, wholesale (100 pounds)...	3.43	4.41	77.8
Chickens (pound).....	.22	.29	75.9
Eggs (dozen).....	.30	.51	58.9
Wool (pound).....	.56	.51	109.5

* Parity price is the August 1909-July 1914 average price increased by the rise in index of prices paid by farmers, including interest and taxes.

Farm to Retail Price Spreads for Farm Food Products*

Source: U. S. Department of Agriculture.

Year	Retail cost (dollars)	Net farm value (dollars)	Farmer's share of consumer's dollars (%)
Average:			
1913-19.....	361	170	47
1920-24.....	444	181	41
1925-29.....	439	183	42
1930.....	422	163	39
1932.....	285	90	32
1933.....	277	90	32
1935.....	347	134	39
1936.....	350	141	40
1937.....	363	151	42
1938.....	329	127	39
1939.....	318	122	38
1940.....	319	127	40
1941.....	349	154	44
1942.....	409	195	48
1943.....	459	236	51
1944.....	451	233	52
1945.....	459	246	54
1946.....	528	279	53
1947.....	644	335	52
1948.....	690	351	51
1949.....	646	309	48
1950†.....	620	294	47

* Retail cost of 1935-39 average annual purchases of farm food products by a family of three average consumers; farm value of equivalent quantities sold by producers adjusted for value of by-products. † Average first 5 months.

WHAT WE OWN

What and how consumers, businessmen and government units save and invest jointly determines the enduring wealth of the country. Money, stocks, bonds, property of all kinds—these make up the stock of American wealth. The facts about them are statistically summarized and analyzed in the present section.

The following figures on the expanding ownership of modern conveniences point up the rise in American living standards.

Automobiles: 8,000 in 1900; 17,500,000 in 1925; 36,292,703 today.

Telephones: 1,355,900 in 1900; 16,935,900 in 1925; 40,709,398 today.

Homes with radios: 3,500,000 in 1925; 39,281,230 today; plus 3,600,000 homes with television today.

Homes with electric washers: 3,500,000 in 1926; 25,563,800 today.

Homes with electric ranges: 370,000 in 1926; 6,706,000 today.

Homes with vacuum cleaners: 5,200,000 in 1926; 19,660,500 today.

Homes with electric refrigerators: 142,000 in 1926; 29,500,000 today.

Selected Types of Individual Savings (in millions of dollars)

Source: Federal Reserve Board, Treasury Department, Securities and Exchange Commission; "The Insurance Year Book," Federal Home Loan Bank, Department of Commerce.

Type	1939	1941	1943	1945	1946	1947	1948	1949
Life insurance.....	22,968	26,488	31,256	37,509	40,800	43,679	47,320	49,755*
Time deposits:								
Mutual savings banks.....	10,523	10,532	11,738	15,385	16,869	17,746	18,387	19,273
Commercial banks.....	15,258	15,884	19,224	30,135	33,808	35,249	35,804	36,146
Postal savings system.....	1,278	1,313	1,786	2,932	3,283	3,416	3,329	3,197
Savings and loans association assets.....	4,060	4,652	5,494	7,365	8,548	8,745	9,923	14,650
Government pension and trust funds.....	7,369	10,369	16,569	26,369	29,869	33,269	36,669	38,869
U. S. savings bonds.....	2,229	6,212	27,363	48,183	49,776	52,053	55,051	56,707
Demand deposits.....	8,300	11,400	18,200	26,500	31,100	32,300	30,800	29,800
Currency.....	4,200	6,800	14,400	20,800	20,800	20,600	19,900	19,300
Total.....	76,185	93,650	146,029	215,178	234,853	247,057	257,183	267,697

* Estimated.

Money in Circulation (in millions of dollars)

Source: U. S. Treasury Department.

June 30	Total*	Gold certifi- cates	Silver dollars	Silver certifi- cates	Sub- sidiary silver	Minor coin	United States notes	Federal reserve notes	Federal reserve bank notes	National bank notes
1929.....	4,746	935	44	387	284	115	262	1,693	4	653
1932.....	5,695	716	30	353	256	114	289	2,780	3	701
1935.....	5,567	117	32	702	296	125	285	3,223	82	704
1937.....	6,447	88	38	1,078	341	144	282	4,169	38	269
1938.....	6,461	79	39	1,230	342	146	262	4,114	30	217
1939.....	7,047	72	42	1,454	361	155	266	4,484	26	187
1940.....	7,848	67	46	1,582	384	169	248	5,163	22	165
1941.....	9,612	63	53	1,714	434	194	300	6,684	20	151
1942.....	12,383	59	66	1,754	504	213	317	9,310	19	139
1943.....	17,421	57	84	1,649	610	236	322	13,747	584	132
1944.....	22,504	54	103	1,588	700	263	322	18,750	597	126
1945.....	26,746	52	125	1,651	788	292	323	22,868	527	120
1946.....	28,245	50	140	2,025	843	317	317	23,973	464	114
1947.....	28,297	48	148	2,061	876	331	320	23,999	406	106
1948.....	27,903	45	156	2,062	919	346	321	23,600	353	99
1949.....	27,493	43	164	2,061	940	355	319	23,209	309	93
1950.....	27,154	41	170	2,177	964	361	321	22,759	274	86

* Includes Treasury notes of 1890 and for 1929 and 1932 gold coin.

Sales and Redemptions of United States Savings Bonds (in millions of dollars)

Source: U. S. Treasury Department.

Distribution of Consumer Liquid Assets

Source: Federal Reserve Board.

Year	All Series Sales*	Re- demp- tions	Amount out- stand- ing†	Series E Sales*	Re- demp- tions	Amount out- stand- ing†
1941	3,036	168	6,140	1,145	11	1,134
1943	13,729	1,585	27,363	10,344	1,380	15,957
1945	12,937	5,558	48,183	9,822	4,963	30,727
1946	7,427	6,427	49,776	4,466	5,423	30,263
1947	6,694	5,126	52,053	4,085	3,930	30,997
1948	7,295	5,144	55,051	4,224	3,728	32,188
1949	5,833	5,101	56,707	4,208	3,448	33,766
1950†	3,049	2,869	57,536	2,036	1,775	34,494

Spending units ranked by incomes	Percentage of liquid assets held:			
	1949	1948	1947	1946
Highest tenth.....	44	43	39	40
Second tenth.....	11	14	15	13
Third tenth.....	9	8	9	10
Fourth tenth.....	8	7	7	7
Fifth tenth.....	6	5	7	8
Sixth tenth.....	6	6	7	6
Seventh tenth.....	6	4	5	5
Eighth tenth.....	3	4	4	4
Ninth tenth.....	4	4	4	3
Lowest tenth.....	3	5	3	4
All units.....	100	100	100	100

* Issue price. † End of year. ‡ Jan. to June, inclusive.

WHAT WE OWE

Much modern wealth is also debt; one man's asset is frequently another man's liability. For example, while 85 million Americans consider their \$50 billion in war and savings bonds as assets they own, the bonds are also liabilities which, as part of the public debt, must be financed or retired.

Our steadily growing national debt was multiplied by the war. Worried by the size of this debt and the burden it enforced on the economy in the form of interest charges, people were sharply divided on the question of how much of our current income should be used for debt retirement.

The debt we incur as individuals took a nose dive early in the war, partly because of government restrictions and partly because many of the goods we normally buy on credit just weren't available. With the end of the war, however, consumer credit began to rise sharply, but came under new controls when rearmament became necessary.

Net Debt in the United States*

(in billions of dollars)

Source: U. S. Department of Commerce.

Class	1916	1920	1925	1930	1935	1940	1945	1947	1948	1949
Net Public Debt:										
Federal.....	1.2	23.7	20.3	16.5	34.4	44.8	252.7	223.3	216.5	218.6
State and local.....	4.4	5.9	10.0	14.1	16.0	16.5	13.7	14.4	16.2	18.1
Total public debt.....	5.6	29.6	30.3	30.6	50.5	61.3	266.5	237.7	232.7	236.7
Net Private Debt:										
Corporate.....	40.2	57.7	72.7	89.3	74.8	75.6	85.3	106.1	113.6	111.6
Long-term.....	29.1	32.6	39.7	51.1	43.6	43.7	38.3	46.1	50.9	54.4
Short-term.....	11.1	25.1	33.0	38.2	31.2	31.9	47.0	60.0	62.7	57.2
Individual & noncorporate.....	36.3	48.1	59.7	71.6	50.6	54.0	55.4	72.7	84.5	93.8
Mortgage: Farm.....	5.8	10.2	9.7	9.4	7.4	6.5	4.7	4.9	5.1	5.4
Nonfarm.....	8.5	11.9	21.6	32.7	26.1	27.2	27.8	39.9	46.3	51.5
Nonmortgage: Farm.....	2.0	3.9	2.8	2.4	1.5	2.6	2.5	3.6	5.5	6.4
Nonfarm.....	20.0	22.1	25.6	27.1	15.6	17.7	20.5	24.4	27.7	30.5
Total private debt.....	76.5	105.8	132.2	160.8	125.4	129.6	140.7	178.8	198.1	205.5
Total public and private debt.....	82.1	135.4	162.7	191.4	175.9	190.9	407.2	416.5	430.8	442.2

* End of year. 1949

Public Debt of the United States

Source: U. S. Treasury Department.

June 30—	Gross debt	
	Amount (in millions of dollars)	Per capita (dollars)
1800*	\$ 83	\$ 15.87
1860.....	65	2.06
1865.....	2,678	75.01
1900.....	1,263	16.60
1915.....	1,191	11.85
1920.....	24,299	228.23
1929.....	16,931	139.04
1930.....	16,185	131.51
1932.....	19,487	156.10
1933.....	22,539	179.48
1935.....	28,701	225.55
1937.....	36,425	282.75
1939.....	40,440	308.98
1942.....	72,422	537.80
1943.....	136,696	1,001.46
1944.....	201,003	1,455.67
1945.....	258,682	1,853.21
1946.....	269,422	1,907.62
1947.....	258,286	1,793.23
1948.....	252,292	1,721.30
1949.....	252,770	1,695.46
1950.....	257,357	1,700.12

Consumer Credit

(in millions of dollars)

Source: Federal Reserve Board.

End of year	Total*	Installment sale debt	Charge account sale debt	Cash loan debt†
1929.....	7,637	2,515	1,749	2,768
1932.....	4,093	999	1,114	1,489
1933.....	3,912	1,122	1,081	1,242
1935.....	5,419	1,805	1,292	1,850
1937.....	7,491	2,752	1,459	2,713
1938.....	7,047	2,313	1,487	2,724
1939.....	7,969	2,792	1,544	3,100
1940.....	9,115	3,450	1,650	3,488
1941.....	9,862	3,744	1,764	3,744
1942.....	6,578	1,617	1,513	2,800
1943.....	5,378	882	1,498	2,311
1944.....	5,803	891	1,758	2,425
1945.....	6,637	942	1,981	2,942
1946.....	10,191	1,648	3,054	4,615
1947.....	13,673	3,086	3,612	6,055
1948.....	16,319	4,528	3,854	6,974
1949.....	18,779	6,240	3,909	7,638
1950‡.....	20,979	7,600	3,654	8,681

* Includes service credit.

† Installment and single-payment loans.

‡ End of August, preliminary.

* Figures for 1800 are as of Jan. 1.

UNITED STATES AND THE WORLD ECONOMY

U. S. Foreign Trade

U. S. foreign trade during 1949 continued to recede from the record 1947 value. The 1949 export value was \$12 billion, a decline of 5 per cent from the 1948 value. In value, it was more than four and a half times the average of the prewar period 1936-38; in volume, more than twice.

The \$6,626-million import value in 1949 was a decline of 9 per cent from the record 1948 value of \$7,100 million, but the decline principally reflected price decreases. Volume was only slightly under the 1948 level.

U. S. exports in 1949 were hit by the continuing shortage of dollars, particularly during the latter part of the year. Imports were affected by the slowdown of U. S. business activity during early 1949 and by the postponement of import purchases pending the widespread September currency devaluations.

Currency devaluations, record U. S. business activity, rising prices and stepped-up production abroad helped raise imports to new record levels during the first six months of 1950, when they were at an annual rate of \$7,500 million. Exports continued to sag during the first half of 1950, reflecting decreased foreign-aid expenditures, increased foreign competition, and a continued "dollar shortage." Exports dur-

TABLE I

United States Exports, Imports and Merchandise Trade

(Value in millions of dollars)

Source: U. S. Department of Commerce.

Yearly average and year	Total exports*	General imports	Imports as per cent of exports	Excess of exports (+) or imports (-) total
1936-38.....	2,967	2,489	83.9	+478
1939-41.....	4,115	2,763	67.1	+1,352
1942-44.....	11,767	3,349	28.5	+8,418
1941.....	5,147	3,345	65.0	+1,802
1942.....	8,080	2,745	34.0	+5,335
1943.....	12,963	3,382	26.1	+9,581
1944.....	14,412†	3,921	27.2	+10,491
1945.....	10,527†	4,136	39.3	+6,391
1946.....	10,187†	4,909	48.2	+5,278
1947.....	15,340	5,733	37.4	+9,607
1948.....	12,653	7,124	56.3	+5,529
1949.....	12,000	6,626	55.2	+5,374
1950†.....	4,889	3,813	80.0	+1,076

* Exports, including re-exports. Data for the war and postwar years include lend-lease and aid and relief shipments as well as the usual commercial trade. Civilian supplies sent to occupied areas through the United States Armed Forces are included beginning 1944. † Includes an estimate of civilian supplies. ‡ First 5 months.

ing this period were at an annual rate of less than \$10 billion.

Table I presents the value of U. S. exports, imports, and the balance of merchandise trade from 1936 to 1950; table II shows the changes in quantity, unit value and total value of United States exports and imports.

As a result of increased imports and declining exports, the U. S. surplus on merchandise account was reduced from a record \$9,607 million in 1947 to \$5,374 million in 1949. The 1949 export balance was still extremely large, however, as the value of exports was almost twice that of imports. In 1936-38 exports exceeded imports by only 19 per cent in value, annual exports during this period averaging \$2,967

TABLE II

Indexes of U. S. Exports and Imports

Source: U. S. Department of Commerce.

Yearly average	Quantity	Unit value	Value
Total exports, United States merchandise: ¹			
1936-38.....	100	100	100
1939-41.....	135	102	138
1942-44.....	269	148	399
1929.....	136	130	176
1937.....	108	104	113
1941.....	157	109	172
1942.....	206	133	274
1943.....	301	146	439
1944.....	290	167	484
1945.....	197	167	328
1946.....	206	158 ²	325
1947 ³	259	188	487
1947 ⁴	275	188	518
1948.....	214	200	428
1949.....	220	185	406
1950 ⁵	185	176	325
Imports for consumption:			
1936-38.....	100	100	100
1939-41.....	104	105	109
1942-44.....	97	140	136
1929.....	116	154	179
1937.....	114	108	122
1941.....	117	112	131
1942.....	87	129	113
1943.....	97	141	138
1944.....	105	151	158
1945.....	107	155	166
1946.....	113	172	195
1947.....	109	211	229
1948.....	123	235	288
1949.....	120	224	268
1950 ⁵	135	224	302

¹ Indexes for the war and postwar years cover lend-lease, UNRRA, other aid and relief, and commercial exports. ² Apparent price decline is due to the diminishing part in total trade of lend-lease exports, which had shown a greater price rise during the war years than non-lend-lease goods. In 1945 the unit value of non-lend-lease exports was 144 (1936-38 as 100) as compared with 167, the unit value of total exports as shown in this table. ³ Excluding civilian supplies. ⁴ Including civilian supplies. ⁵ First 5 months.

TABLE III
Exports of Goods and Services and Means of Financing
 (Billions of dollars)

Source: U. S. Department of Commerce.

Period	Surplus of exports of goods and services ¹	U. S. government sources ² (net)	Means of financing		
			Liquidation of foreign gold and dollar assets ³ (net)	Outflow of United States private capital ⁴ (net)	Other means of financing ⁵ (net)
1936-38 average.....	0.5	...	0.8	-0.2	-0.1
1946.....	7.8	5.0	1.9	.4	.5
1947.....	11.5	5.8	4.5	.8	.4
1948.....	6.7	5.1	.8	.9	...
1949.....	6.2	5.9	...	.6	-.3
1950 ⁶	2.7	4.7	-2.4	.6	-.2

¹ Includes income on investments. ² Includes grants and loans but excludes subscription to the capital of the International Bank for Reconstruction and Development and the International Monetary Fund. ³ Includes net sales of gold to the U. S. and net liquidation of foreign dollar assets, including long-term investments. Excludes liquidation of assets held by the International Bank and the International Monetary Fund. ⁴ Includes both long-term and short-term capital but excludes purchase of obligations of the International Bank. ⁵ Includes private gifts, net dollar disbursements by the International Bank and the International Monetary Fund, and allowance for errors and omissions. ⁶ First half, at annual rate, preliminary.

million as compared with \$2,489 for imports.

Altogether, the difference between total U. S. receipts during 1949 on current account (\$16 billion) and U. S. payments to foreign countries (\$9.7 billion) amounted to \$6.2 billion. Foreign countries financed this deficit in their dealings with the U. S. by U. S. government grants and loans (\$5.9 billion) and by a net increase of U. S. private investment abroad (\$.3 billion). During the year, foreign countries increased their holdings of U. S. gold and dollar reserves. Table III shows how the surplus of American goods and services to other countries was financed for 1936-38, 1946-49, and the first half of 1950.

The big gap between what the U. S. earns by exports of goods and services and what foreigners supply it, accounts for the so-called "dollar shortage." Despite continued reduction of this gap during 1949 and the first half of 1950, the dollar problem is still large. Although production in most foreign countries now approximates or exceeds prewar levels (see Table IV for Marshall Plan countries), it has been difficult to increase imports, particularly of manufactured goods. Goods often do not appeal to U. S. buyers; foreigners lack knowledge of U. S. marketing and selling techniques; competition with low-priced, mass-produced goods is difficult; and tariff duties and customs regulations are still big obstacles to imports.

At the same time, the U. S. still remains the best source of supply of machinery, equipment and many materials for needed foreign recovery and continued development of economically backward areas. With dollars earned by exports to the United States limited, foreign coun-

tries during 1949 had to tighten further their restrictions on imports of non-essential products from this country, so as to conserve their dollars to finance the purchase of essential imports.

The problem of financing imports essential to the maintenance of tolerable living standards created the danger that communism would spread, and led to the enactment of the European Recovery Program in 1948 and the formulation of the Point Four program a year later. European viability had been impaired by war destruction, shortages of raw materials, run-down equipment and loss of income from foreign investment. Idea behind the ECA program is to assist Western Europe by supplying the food, raw materials and industrial

TABLE IV
Marshall Plan Recovery Indexes

Source: Economic Cooperation Administration.
 (Figures pertain to first quarter of years shown.)

Country	Indexes (1938 = 100)			Per cent change	
	1948	1949	1950	1948-50	1949-50
Austria.....	69	95	127	+84	+34
Belgium.....	112	120	116	+4	-3
Denmark.....	132	138	151	+14	+9
France.....	110	124	121	+10	-2
Germany, Western...	41 ¹	70	82	+100	+17
Greece.....	69	82	97	+41	+18
Ireland.....	125	132	151	+21	+14
Italy.....	90	95	109	+21	+15
Netherlands.....	104	120	134	+29	+12
Norway.....	125	137	147	+18	+7
Sweden.....	148	160	166	+12	+4
United Kingdom.....	128	137	149	+16	+9
All countries.....	97	113	123	+27	+9

¹ Bizzone.

equipment it needs and is not in a position to pay for, until it can be put on a self-supporting basis (1952 is the anticipated end date).

During the first two years of the ECA program (April, 1948, through March, 1950), Marshall Plan countries were authorized to purchase \$8,985 million of recovery goods and services. More than 47 per cent of the two-year total was for authorizations approved for the purchase of industrial items, about 45 per cent for food and agricultural commodities, about 7 per cent for ocean freight, and less than 1 per cent for technical services. Chief beneficiary under the program was the United Kingdom, with a total of \$2,418 million; France and French territories were next with \$1,894 million; Italy, third with \$1,007 million; and Western Germany, fourth with \$874 million. Table V lists the allocation of ECA funds during the first two years of the program.

During the twenties the ratio of exports to the total production of movable goods averaged about 10 per cent. Table VII showing the ratio between exports and the total production of movable goods indicates that, while this proportion declined during the thirties and stood at 7.7 per cent in 1937, it increased to 12 per cent during 1944. The percentage of movable

TABLE VI

United States Production of Movable Goods, Value of Exports, and the Proportion Exported in Selected Years
(in billions of dollars)

Source: U. S. Department of Commerce.

Year	Production of movable goods	Exports	Exports as percentage of production
1914.....	20.2	2.1	10
1919.....	47.5	7.8	16
1921.....	33.9	4.4	13
1925.....	47.2	4.8	10
1927.....	47.5	4.8	10
1929.....	53.2	5.2	10
1937.....	44.0	3.3	7.7
1939.....	41.9	3.1	7.5
1941.....	64.2	5.0	8
1943.....	113.1	12.6	11
1944.....	114.8	14.2	12
1945.....	102.9	9.6	9
1946.....	100.4	11.9*	11.9
1947.....	130.0	15.0	11.7
1948.....	137.5	12.5	9.1
1949.....	127.2	11.8	9.3

* Excluding 1.6 billion dollars of surplus property.

TABLE V

ECA Allotments to Participating Countries, April, 1948-March, 1950*
(Millions of dollars)

Source: Economic Cooperation Administration.

Country	Apr., 1948-June, 1949				Total, Apr., 1948-Mar., 1950
	Direct grants	Conditional aid	Loans	Total	
Austria.....	276.9	3.1	....	280.0	429.4
Belgium-Luxemburg	3.0	207.5	50.9	261.4	481.4
Denmark.....	90.1	5.1	31.0	126.2	197.0
France.....	1,131.7	9.7	172.0	1,313.4	1,894.1
Germany, Western	516.1	97.4	....	613.5	873.7 ¹
Greece.....	191.7	....	....	191.7	316.0
Iceland.....	2.5	3.5	2.3	8.3	13.2
Ireland.....	....	....	86.3	86.3	121.6
Italy.....	553.7	47.3	67.0	668.0	1,007.0
Netherlands ²	413.1	11.3	146.7	571.1	824.1
Norway.....	49.6	16.5	35.0	101.1	182.0
Portugal.....	....	....	....	....	22.0
Sweden.....	....	25.0	20.4	45.4	88.0
Trieste.....	17.9	....	....	17.9	27.3
Turkey.....	....	11.0	38.0	49.0	90.2
United Kingdom...	963.0	334.0	322.7	1,619.7	2,417.9
Total³.....	4,209.3	771.4	972.3	5,953.0	8,984.9

¹ Includes allotments previously assigned to Bizzone and French Zone. ² Includes Indonesia. ³ Excludes civilian relief expenditures by the military in occupied areas and funds for special programs, such as technical assistance, strategic materials, and voluntary relief shipments.

goods exported during 1949 was 9.3 per cent. Table VI shows commodity exports as a percentage of the production of movable goods in the U. S. from 1914-49.

On the other hand, the ratio of U. S. imports of goods to the gross national product ranged, during the prewar period, from a high of 5.9 per cent in 1920 to a low of 2.5 per cent in 1932. During the 10-year period 1920-29, the average ratio was 4.4 per cent; during the thirties it declined to 2.9 per cent. For 1948, the ratio reached a postwar high of 3.0 per cent. It stood at 2.8 per cent in 1949.

Because the percentage of movable goods exported and the ratio of commodity imports to national income are small, there is a widespread belief that foreign trade is not important to the American economy. This view overlooks the importance of export markets to particular industries and the strategic character of many imports. Exports account for major percentages of the total United States production of cotton, leaf tobacco, dried fruit, lard, aircraft and parts, sewing machines, office appliances, mining machinery, tractors, petroleum products, sulfur, carbon black and naval stores. Volume exports mean the difference between profit and loss in many American industries.

Similarly, the United States is dependent upon imports to supply many goods essential to American security, living

TABLE VII: United States Exports of Leading Commodities
(Value in millions of dollars. Commodities in each group are listed in order of value in 1948)

Source: U. S. Department of Commerce.

Commodity	Value	
	1936-38 average	1948
Crude materials:		
Cotton, unmanufactured.....	319	503
Coal.....	56	479
Tobacco, unmanufactured.....	143	215
Crude petroleum.....	91	117
Foodstuffs:		
Wheat, including flour.....	62	1,393
Fruits and vegetables.....	98	283
Dairy products and eggs.....	6	256
Meats and edible fats.....	43	128
Manufactures, including semimanufactures:		
Machinery, total*.....	434	2,307
Electrical apparatus.....	102	516
Industrial machinery, total*.....	224	1,277
Agricultural implements, excluding tractors.....	65	114
Tractors, new.....	36	185
Automobiles, including parts and accessories, total.....	286	899
Passenger automobiles, new.....	113	281
Motor trucks and busses, new.....	76	343
Textiles and textile manufactures†.....	87	844
Cotton cloth, duck, and tire fabric.....	27	314
Chemicals and related products‡.....	117	768
Iron and steel-mill products:		
Total, including scrap.....	199	649
Total, excluding scrap.....	149	642
Petroleum products.....	253	540
Motor fuel and gasoline.....	82	134
Lubricating oils.....	74	198
Merchant vessels.....	2	255

* Includes electrical apparatus, industrial machinery, office appliance, printing machinery, agricultural machinery and implements. † Includes finished products, and yarns and other semimanufactures. ‡ Excludes explosives and phosphate rock.

TABLE VIII: Imports for Consumption
(Value in millions of dollars. Commodities in each group are listed in order of value in 1948)

Source: U. S. Department of Commerce.

Commodity	Value	
	1936-38 average	1948
Crude materials:		
Crude rubber.....	179	309
Wool, unmanufactured.....	57	308
Crude petroleum.....	21	283
Nonferrous ores and concentrates*.....	32	216
Undressed furs.....	65	159
Oilseeds.....	46	151
Hides and skins, raw, except furs.....	52	108
Tobacco, unmanufactured.....	34	78
Foodstuffs:		
Coffee.....	141	698
Cane sugar.....	152	313
Fruit, edible nuts and vegetables.....	81	222
Cocoa or cacao beans.....	36	194
Fish, including shellfish.....	31	111
Wines and spirits.....	70	83
Semimanufactures:		
Nonferrous metals, total.....	146	562
Copper.....	40	203
Tin.....	75	176
Wood pulp.....	86	212
Gas oil and fuel oil.....	20	182
Vegetable oils and fats, expressed.....	86	84
Tung oil.....	18	27
Diamonds, gems cut but unset.....	23	56
Finished manufactures:		
Paper and manufactures.....	120	438
Newsprint.....	107	413
Burlaps.....	35	131
Clocks and watches.....	9	60
Wool manufactures.....	20	55
Cotton manufactures.....	42	45
Flax, hemp, and ramie manufactures.....	26	31
Passenger automobiles.....	1	30

* Including those used in manufacture of iron and steel. † Including those used in manufacture of iron and steel; also a small value of finished products.

standards and the continued efficient operation of its industry. Coffee, bananas, cocoa, chiclé, shellac, tin, antimony, cadmium, manganese, chrome, nickel, asbestos, mica, quartz crystals, natural rubber, silk, diamonds, burlaps, and cordage fibres are almost entirely imported from abroad. In addition large imports of sugar, hides, furs, wool, wood pulp, newsprint, lead, zinc, copper, bauxite, waxes, tanning extracts, vegetable oils and crude petroleum are needed to augment short domestic production.

Tables VII and VIII list the principal United States commodity exports and imports from 1936 to 1949.

United States exports reflect the industrial character of the country, 55 per cent of total exports in 1949 consisting of finished manufactured goods. Semimanufactured goods accounted for 11.4 per cent, foodstuffs 19 per cent and crude materials 15 per cent. Food exports during 1949 constituted a higher percentage of total exports than prewar, reflecting the continued world shortage of foodstuffs. United States exports of foodstuffs averaged only 10.5 per cent of total exports prewar.

Foodstuffs represented the most important class of imported goods, amounting to 31 per cent of the total. Crude materials amounted to 28.1 per cent; semimanufactures, 18.9 per cent; and finished manufactures,

21.6 per cent. Foods not produced in the U. S. and raw materials for U. S. industry constituted the most important imports. Table IX presents a breakdown of U. S. exports and imports by economic classes.

Western hemisphere countries are the leading market for American exports and the most important source of United States imports. In 1949 Canada and the other American Republics supplied 58 per cent of United States imports and bought about 39 per cent of total exports. The importance of western hemisphere countries in the foreign trade of the United States increased greatly during the war and postwar period—prewar these countries supplied only 34.7 per cent of U. S. imports and received 32.6 per cent of U. S. exports. As a result of the war, economic disruption and political instability, Europe and the Far East have declined in importance as sources of U. S. imports. From the 1936-38 period to 1949, imports from Continental Europe dropped from 29.1 to 15 per cent of total U. S. imports; imports from the Far East dropped from 30.4 to 18 per cent.

Latin America has expanded purchases of United States exports more than any other area. Compared with 16 per cent in the period 1936-38 and 22 per cent in 1946, the American Republics received 23 per cent of total U. S. exports during 1948.

TABLE IX: Merchandise Trade, by Economic Classes

(Value in millions of dollars)

Source: U. S. Department of Commerce.

Yearly average and year	Total		Crude materials		Foodstuffs		Semimanufactures		Finished manufactures			
									Excluding military		Military equipment*	
	Value	Per-cent	Value	Per-cent	Value	Per-cent	Value	Per-cent	Value	Per-cent	Value	Per-cent
Exports of United States merchandise:												
1936-38.....	2,925	100.0	669	22.9	306	10.5	519	17.7	1,431	48.9	.....	.....
1939-41.....	4,026	100.0	457	11.4	352	8.7	737	18.8	1,946	48.3	515	12.8
1942-44.....	11,669	100.0	545	4.7	1,473	12.6	1,035	8.9	3,895	33.4	4,721	40.5
1945.....	9,586	100.0	875	9.1	1,676	17.5	782	8.2	4,342	45.3	1,909	19.9
1946.....	9,503	100.0	1,416	14.9	2,172	22.9	896	9.4	5,019	52.8	.....	.....
1947†.....	15,162	100.0	1,602	10.6	3,106	20.5	1,785	11.8	8,670	57.2	.....	.....
1948.....	12,494	100.0	1,489	11.9	2,582	20.7	1,367	10.9	7,056	56.5	.....	.....
1949.....	11,885	100.0	1,780	15.0	2,226	18.7	1,354	11.4	6,525	54.9	.....	.....
Imports for consumption:												
1936-38.....	2,461	100.0	760	30.9	720	29.2	503	20.4	478	19.4	.....	.....
1939-41.....	2,680	100.0	1,044	39.0	622	23.2	590	22.0	424	15.8	.....	.....
1942-44.....	3,346	100.0	1,052	31.4	997	29.8	674	20.1	467	14.0	155	4.6
1945.....	4,075	100.0	1,164	28.6	1,155	28.3	928	22.6	632	15.5	196	4.8
1946.....	4,792	100.0	1,700	35.5	1,317	27.5	930	19.4	845	17.6	.....	.....
1947.....	5,643	100.0	1,743	30.9	1,672	29.6	1,245	22.1	983	17.4	.....	.....
1948.....	7,038	100.0	2,108	30.0	2,003	28.5	1,632	23.2	1,296	18.4	.....	.....
1949.....	6,598	100.0	1,855	28.1	2,075	31.4	1,422	21.6	1,246	18.9	.....	.....

* Military equipment includes aircraft, military tanks, explosives, firearms, and other strictly military items.

† Beginning 1947, export data include civilian supplies sent to occupied areas through the U. S. Armed Forces.

The 1949 total amounted to \$2,714 million, an increase of nearly more than 500 per cent over the prewar average, although lower than the peak value of \$3,858 million in 1947.

Imports from Latin America totaled \$2,303 million in 1949, showing an increase of more than 300 per cent over the 1936-38 average. Normally U. S. imports from this area exceeds the value of U. S. exports; heavy adverse Latin American trade balances with the U. S. of \$1,708 million during 1947, \$832 million in 1948, and \$409 million in 1949 were largely due to heavy deferred demands for goods which could not be satisfied during the war and to continued inability of European sources to supply requirements. Adverse balances have greatly reduced Latin American dollar reserves and led to severe restrictions on non-essential imports throughout Latin America.

An outstanding trade development was the spectacular reduction of the U. S. export surplus during 1949 and the first half of 1950. This surplus, which had been running at an annual rate of \$8.1 billion during the second quarter of 1949, was narrowed to an annual rate of \$2.8 billion during the second quarter of 1950. The reduction was principally due to a drastic decline in the value of U. S. commodity exports to a level under \$10 billion a year, reflecting increased foreign restrictions on imports of U. S. goods. Another factor curbing U. S. exports was increased availability of goods from non-dollar sources. Imports, however, increased and, by the middle of 1950, were running at the record rate of \$7.5 billion. The increase was due to the current record peacetime rate of production in the U. S., increased stockpiling of strategic and critical materials as the "cold war" heated up, and the more competitive prices resulting from the widespread currency devaluations in the fall of 1949.

Table X shows total exports and imports by leading countries and areas during the period 1936-49.

U. S. Foreign Investments

Before the First World War the United States was a debtor nation on capital account; foreign investments in the United States exceeded United States investments abroad by \$3.7 billions in 1914. World War I, however, completely changed this condition and by the end of 1919, United States investments abroad exceeded foreign investments in the United States by approximately \$3.7 billion. As a result of the great expansion of American foreign investments during the twenties, our net creditor position, excluding war debts, stood at \$8.8 billion in 1930 as compared with \$3.7 billion in 1919.

Foreign holdings in the United States,

on the other hand, increased during the period 1933-39. Foreign capital, seeking safety from possible currency devaluation and the uncertainties of war, sought refuge through conversion into dollar holdings. Short-term dollar holdings of foreigners increased \$2.8 billion between 1933 and 1939, while foreign holdings of American securities largely purchased in the stock market, increased by \$1.4 billion. At the end of 1939, the net creditor position of the U. S. had declined to \$1.8 billion.

This movement gave way in 1940-41 to a reduction of foreign holdings, principally by the British, to finance war purchases here. After the entry of the United States into the war, however, foreign holdings in the United States increased as government expenditures abroad for the procurement of materials and for the pay and maintenance of troops resulted in substantial acquisitions of dollar balances by foreign countries. These large foreign dollar balances were largely maintained during 1946 so that the net creditor position of the U. S. amounted to only \$.8 billion at the end of 1946.

During 1947 the net creditor position of the United States rapidly increased as foreign countries reduced their dollar balances, liquidated U. S. securities, and drew on American loans to finance the huge gap between their payments and receipts of dollars. The United States government increased its total loans by \$3.9 billion—largely as a result of drawings on the British loan—and the net increase in private long and short-term credit amounted to \$727 million. Foreign-held dollar assets were reduced by \$2.2 billion. As a result of these developments the net creditor position of the United States exceeded \$12 billion at the end of 1947.

The net creditor position of the U. S. has continued to increase since 1947, but at a slower rate. U. S. foreign aid during this period has been in grants rather than loans, and drains on foreign dollar holdings were reduced by restricting imports from the U. S. During 1948, the net increase in U. S. long-term foreign investment was \$1,760 million; in 1949, \$1,270 million; and, in the first quarter of 1950, \$312 million. At the end of 1949 (see Table XI), the net creditor position of the U. S. on investment account exceeded \$15 billion.

International Bank

The International Bank for Reconstruction and Development, established under the Bretton Woods Agreement, began operations in 1947.

The Bank has an authorized capital of \$10 billion of which \$8,348.5 million has been subscribed by the 47 member nations (Poland, which was an original member of the Bank and Fund, has withdrawn from membership). In accordance with the

TABLE X: Total Exports, and General Imports of Merchandise, by Countries
(Value in millions of dollars)

Source: U. S. Department of Commerce

Area and country	Exports, including re-exports			General imports		
	1936-38 average	1948	1949	1936-38 average	1948	1949
NORTH AND SOUTH AMERICA:						
Canada.....	453.7	1,912.2	1,939.5	344.8	1,553.6	1,512.1
20 American Republics.....	484.6 ¹	3,165.6	2,712.4	542.4 ¹	2,351.9	2,303.8
Mexico.....	82.5	521.5	462.4	52.7	246.2	244.2
Central America.....	46.5 ¹	239.0	262.7	32.2 ¹	132.1	139.0
Cuba.....	78.7	441.0	380.3	127.1	375.0	387.5
Colombia.....	35.9	197.3	175.9	48.3	236.5	241.5
Venezuela.....	40.9	516.6	518.5	23.0	270.8	278.8
Peru.....	16.4	66.5	86.2	12.8	34.9	40.3
Chile.....	21.4	105.5	142.2	33.6	179.1	152.5
Brazil.....	59.9	497.3	381.9	106.9	513.9	551.9
Argentina.....	79.3	380.9	129.1	81.8	179.9	97.5
Uruguay.....	8.9	60.2	34.6	10.3	57.7	54.1
Netherlands Antilles.....	30.4	81.5	82.4	18.4	120.0	110.5
EUROPE						
16 ERP countries.....	1,128.7	4,182.3	4,071.8	606.5	977.1	842.7
Belgium.....	77.0	309.6	306.8	58.6	103.7	94.6
France.....	142.6	591.2	497.2	65.0	73.0	61.2
Germany.....	111.8	862.7	820.3	78.9	31.7	45.5
Italy.....	64.7	417.9	458.1	43.2	94.0	71.2
Netherlands.....	81.2	309.6	283.8	44.9	43.5	59.2
Sweden.....	57.3	118.0	85.4	50.6	91.3	54.6
Switzerland.....	9.3	171.5	142.6	23.5	105.8	93.1
United Kingdom.....	499.2	644.1	700.4	173.8	289.5	226.8
Turkey.....	11.5	100.9	120.4	15.5	50.0	55.7
Eastern European countries.....	111.0	167.7	109.2	103.2	157.1	109.7
U.S.S.R.....	48.7	27.9	6.6	25.1	86.8	39.1
OTHER CONTINENTS						
Western Asia (excluding Turkey).....	20.4	257.7	350.0	15.3	119.1	114.8
Kuwait.....	^a	33.3	22.5	^a	12.6	38.9
Iran.....	6.6	43.6	79.4	4.3	26.7	16.4
Palestine.....	3.2	29.2	79.0	.3	5.2	6.0
Saudi Arabia.....	2.2 ²	84.0	84.8	.4 ²	16.1	20.1
Far East.....	557.2	1,923.8	1,942.3	757.5	1,340.5	1,196.2
British Malaya.....	7.6	82.0	37.6	174.4	269.2	195.6
China.....	43.7	273.3	82.6	75.0	120.3	106.4
Hong Kong.....	16.7	84.2	121.3	7.0	3.6	4.3
Japan.....	244.2	324.7	467.5	167.6	62.7	82.0
India.....	35.4 ³	298.2	253.1	75.0 ³	265.3	238.7
Pakistan.....	^a	17.0	45.6	^a	26.1	27.7
Indonesia.....	22.1	92.3	124.3	84.6	86.6	120.4
Philippines.....	77.3	467.8	439.1	107.3	227.9	206.3
Australia.....	67.0	114.3	142.4	25.1	129.3	97.6
New Zealand.....	22.3	34.1	42.6	13.4	30.4	24.4
Africa:						
Algeria.....	2.3	37.1	26.3	2.6	3.8	4.1
Belgian Congo.....	1.9	49.0	48.4	2.2	33.0	36.2
Egypt.....	12.4	36.4	52.9	9.5	30.1	9.7
South Africa, Union of.....	76.3	492.1	266.0	12.1	135.2	116.4
British West Africa.....	7.6	17.0	14.9	21.8	106.3	82.2
TOTALS:						
British Commonwealth.....	1,242.2	3,905.1	3,837.0	891.9	2,955.7	2,665.0
North America (Northern).....	462.1	1,944.7	1,958.2	352.1	1,593.5	1,552.1
North America (Southern).....	270.2	1,450.6	1,340.1	247.7	946.2	942.2
South America.....	274.1	1,911.6	1,559.0	325.4	1,559.8	1,502.3
Europe.....	1,242.8	4,279.2	4,114.5	709.4	1,121.1	925.4
Asia.....	498.5	2,129.6	2,218.2	748.2	1,345.9	1,241.3
Oceania.....	90.6	152.8	194.5	40.2	163.7	125.3
Africa.....	128.2	784.7	615.7	66.1	393.7	337.7
All areas.....	2,966.5	12,653.1	12,000.2	2,488.9	7,123.8	6,626.3

¹ Includes Canal Zone, 1936 and 1937. ² Arabian Peninsula states. ³ Includes Pakistan previous to 1948.

Bank's charter only 20 per cent of the subscribed capital has been paid in. As of June 30, 1950, the aggregate paid-in capital was the equivalent of \$1,669.7 million, of which \$733.5 million was in U. S. dollars.

In addition to its paid-in capital, the Bank may obtain funds through the sale of securities and is authorized to guarantee loans made by other agencies. Total loans and guarantees made by the Bank are limited to its subscribed capital. The Bank began its borrowing operations on July 15, 1947 and two bond issues totaling \$278 million in securities were sold in the U. S. An issue of \$100 million was refunded at a lower rate in 1950. In addition, the equivalent of \$10.6 million was realized by offerings of bonds in Switzerland during 1948 and 1950.

Up to mid-1950, 25 loans aggregating

TABLE XI: Debtor-Creditor Position of the U. S., End of 1949
(in billions of dollars)

Source: U. S. Department of Commerce.

Investments	1949
U. S. investments abroad:	
Private.....	19.3
Long-term.....	17.8
Direct.....	12.5
Foreign dollar bonds.....	1.7
Securities payable in local currencies.....	2.0
Other long-term.....	1.5
Short-term.....	1.5
Deposits.....	.4
Other short-term.....	1.1
U. S. government.....	13.5
Long-term.....	13.2
Short-term.....	.3
Total U. S. investments abroad.....	32.8
Foreign investments in U. S.:	
Private.....	13.9
Long-term.....	7.8
Direct.....	3.1
Corporate stocks.....	2.7
Corporate bonds ¹.....	.5
Other long-term.....	1.6
Short-term.....	6.0
Deposits.....	5.6
Other short-term.....	.5
U. S. government obligations.....	3.8
Long-term.....	.5
Short-term.....	3.3
Total foreign investments in U. S.....	17.6
Net debtor (-) or creditor (+) position.....	+15.2

¹ Corporate bonds include an estimate of \$95,000,000 for state and municipal obligations. NOTE: No allowance has been made for the value of direct investments abroad damaged during the war, written off, or expropriated without compensation. Holdings of portfolio securities of former enemy countries, or countries where no realistic valuation is obtainable, have been excluded. The estimates are based chiefly on data collected by the U. S. Treasury Department during the war and published in *Census of Foreign-Owned Assets in the United States, 1945*, and *Census of American-Owned Assets in Foreign Countries, 1947*. These data were brought up to date on the basis of all available information, but they may be subject to error.

\$816.4 million were made to France, the Netherlands, Denmark, Luxemburg, Chile, Mexico, Belgium, Brazil, India, El Salvador, Finland, Colombia, Yugoslavia, and Iraq. Table XII shows the amount and date of the loans made by the International Bank.

The Bank finances or assists in financing, on a non-political basis, projects for the reconstruction of war-damaged economies and for the development of underdeveloped countries. The loans made must

TABLE XII: Loans of the International Bank, July, 1950
(in millions of U. S. dollars)

Loan disbursements	Date of agreement	Amount of loan
Repayable in U. S. dollars:		
Crédit National (France).....	May, 1947	250.0
Netherlands.....	Aug., 1947	190.0
Denmark.....	Aug., 1947	40.0
Luxemburg.....	Aug., 1947	10.8
Fomento and Endesa (Chile).....	Mar., 1948	16.0
Netherlands Shipping Companies.....	July, 1948	12.0
Brazilian Traction (Brazil).....	Jan., 1949	70.5
Financiera and Comision (Mexico).....	Jan., 1949	24.1
Belgium.....	Mar., 1949	16.0
Herstelbank (Netherlands).....	July, 1949	8.2
Bank of Finland (Finland).....	Aug., 1949	12.5
India (Rwy. Project).....	Aug., 1949	26.2
Caja de Credito (Colombia).....	Aug., 1949	5.0
India (Agric. Mach. Project).....	Aug., 1949	10.0
Yugoslavia (Timber Project).....	Oct., 1949	2.7
Finland (Timber Project).....	Oct., 1949	2.3
Rio Lempa Comision (El Salvador).....	Dec., 1949	12.5
India (Elec. Power Project).....	Apr., 1950	18.5
Mexlight (Mexico).....	Apr., 1950	25.9
São Fran. Hidro-Elec. Co. (Brazil).....	May, 1950	15.0
Iraq.....	June, 1950	12.8
Total.....		781.0
Repayable in Belgian francs:		
Luxemburg.....	Aug., 1947	1.0
Netherlands.....	Aug., 1947	1.0
Total.....		2.0
Repayable in Swiss francs:		
Netherlands.....	May, 1948	4.0
Herstelbank (Netherlands).....	July, 1949	.6
Fomento and Endesa (Chile).....	Mar., 1948	(*)
Brazilian Traction (Brazil).....	Jan., 1949	.1
Bank of Finland (Finland).....	Aug., 1949	(*)
Total.....		4.7
Repayable in Canadian dollars:		
Brazilian Traction (Brazil).....	Jan., 1949	3.1
Mexlight (Mexico).....	Jan., 1949	.1
India (Rwy. Project).....	Aug., 1949	6.6
Total.....		9.8
Repayable in pounds sterling:		
Fomento and Endesa (Chile).....	Mar., 1948	(*)
Brazilian Traction (Brazil).....	Jan., 1949	1.3
Total.....		1.3
Total, all currencies.....		798.8

* Less than .01 million.

be guaranteed by the borrowing country. The U. S. subscription to the Bank's capital is \$3,175 million and this country has approximately 34 per cent of the voting control of the Bank.

During its first two years, the Bank's loans were predominantly to Europe for reconstruction. More lately, the Bank has directed its attention to development loans, particularly in Latin America.

Foreign Exchange

The obvious difference between foreign and ordinary domestic trade is the fact that the buyer and seller use different currency units. The United States exporter wants payments in dollars; the British importer uses sterling in making his purchases and sales. The price which the American importer pays for the foreign currency is called the rate of exchange. Like all prices, exchange rates are basically influenced by the forces of supply and demand. However, almost all governments now maintain fixed values for their currencies in terms of those of other countries.

American importers offer dollars to the banks in order to obtain foreign purchasing power. Consequently, importers and those who are making foreign payments, such as tourists traveling abroad, persons sending funds to relatives in foreign countries, and businessmen paying premiums to insurance companies abroad, create a demand for foreign currencies. Exporters selling to foreign buyers, motion picture companies receiving royalties on films exhibited abroad and investors receiving interest on foreign investments, create the supply of foreign currencies since the foreign debtor must offer his own currency to obtain the dollars with which to make payment to the American creditor.

A world picture of total supply of and demand for dollars over a period of a year is presented by the annual summary of our international balance of accounts. Figures for 1949 and the first quarter of 1950 appear in Table XIII.

Monetary Fund

The Monetary Fund was established to promote world trade by insuring the stability of exchange rates. Exchange instability had disrupted international trade during the thirties. Member nations under the Fund agreement are bound to maintain stable exchange rates and may not use exchange depreciation as a competitive weapon in seeking to expand foreign markets for their products.

Forty-seven nations are members of the fund, total quotas amount to \$7,921.5 million, the United States subscription of \$1,750 billions representing 34.7 per cent of the total; this country exercises about 34.7 per cent of the voting control of the fund.

The Fund is basically a pool of the world's currencies. While currencies may be devalued to correct a fundamental disequilibrium in a country's balance of accounts, this action may be taken only after consultation with the Fund. When a member nation experiences a temporary shortage of foreign exchange—or the currency, of another member nation—it may, in effect, borrow the required currency from the Monetary Fund. The Fund began stabilization operations in March, 1947, and has (up to Mar. 31, 1950) made loans totaling \$783.4 million, of which \$751.26 million have been in U. S. dollars. Stabilization loans have been made to 19 countries, including Belgium, Chile, Denmark, France, India, Mexico, the Netherlands, Norway, Turkey, the United Kingdom, Costa Rica, Egypt, Czechoslovakia, Ethiopia, Nicaragua, the Union of South Africa, Australia, Yugoslavia and Brazil.

The announcement, Sept. 18, 1949, of a 30.5 per cent devaluation of the British pound created an upheaval in foreign-exchange values. By Sept. 30, 25 other countries announced adjustments in their exchange rates, devaluation varying from 9.1 per cent by Canada to 30.5 per cent by most countries in the sterling area. Consulted on the adjustments, the Fund approved them as helping to make prices of goods in these countries more competitive in world markets, thus contributing to restoration of the international price system. Table XIV lists the par values of currencies of the Fund's member nations.

Trade Agreements

The economic warfare of the thirties brought distress to all of the nations of the world—to those imposing the trade restrictions as well as those against whom the restrictions were aimed. This economic warfare was one of the most potent causes of the Second World War.

The realization of this truth has influenced United States foreign policy during the postwar period. The United States has taken the lead in proposing the renunciation of economic warfare and a co-operative approach to the restoration of world trade and prosperity. The American program includes the mutual scaling down of tariffs under the Reciprocal Trade Agreements program, the establishment of an International Trade Organization and the adoption of a trade charter in which the nations of the world will agree to eliminate restrictive trade practices. It also includes exchange stabilization through the Monetary Fund, and loans, either direct or through the World Bank, to assist in the reconstruction of war-shattered economies and the development of industrially backward areas.

An outstanding achievement in the American program to bring about freer

Table XIII: International Transactions of the U. S. in 1949
(Millions of dollars)

Source: U. S. Department of Commerce.

	1949					1950
	First quarter	Second quarter	Third quarter	Fourth quarter	Total	First quarter
Exports of goods and services:						
Merchandise, adjusted.....	3,448	3,455	2,770	2,664	12,337	2,424
Transportation.....	353	367	318	251	1,289	240
Travel.....	70	102	120	71	363	67
Miscellaneous services:						
Private.....	119	123	127	125	494	136
Government.....	35	44	35	36	150	39
Income on investments:						
Private.....	270	339	269	347	1,225	252
Government.....	28	12	46	12	98	32
Total.....	4,323	4,442	3,685	3,506	15,956	3,190
Imports of goods and services:						
Merchandise, adjusted.....	1,960	1,761	1,593	1,830	7,144	1,968
Transportation.....	191	209	195	173	768	192
Travel.....	111	165	296	116	688	113
Miscellaneous services:						
Private.....	52	53	53	52	210	55
Government.....	138	159	141	138	576	127
Income on investments:						
Private.....	91	66	61	86	304	76
Government.....	7	5	7	6	25	6
Total.....	2,550	2,418	2,346	2,401	9,715	2,537
Balance on goods and services.....	+1,773	+2,024	+1,339	+1,105	+6,241	+653
Unilateral transfers (net):						
Private.....	-139	-126	-112	-138	-515	-112
Government.....	-1,382	-1,557	-1,291	-1,074	-5,304	-1,008
Total.....	-1,521	-1,683	-1,403	-1,212	-5,819	-1,120
Balance on goods, services, and unilateral transfers (net foreign investment).....	+252	+341	-64	-107	+422	-467
U. S. capital (net):						
Private long-term.....	-222	-239	-192	-147	-800	-240
Private short-term.....	+19	+117	+38	-10	+164	+159
Government long-term.....	-295	-106	-34	-35	-470	-72
Government short-term.....	+1	+2	-144	-32	-173	-27
Foreign capital (net):						
Long-term.....	-72	+17	+169	+12	+126	+133
Short-term.....	+127	-243	-178	+213	-81	+123
Increase (-) or decrease (+) in U. S. gold stock.....	-69	-169	-91	+165	-164	+203
Transfers of funds between foreign areas (receipts from other areas (-), payments to other areas (+) and errors and omissions.....	+259	+280	+496	-59	+976	+188

international trade was the conclusion on October 30, 1947 at Geneva of the General Agreement on Tariffs and Trade. The scope of the Agreement is indicated by the fact that the 23 participating countries accounted for more than three-quarters of the world's prewar international trade. The tariff concessions resulting from the Geneva negotiations listed over 45,000 separate items and covered approximately two-thirds of the trade between the participating countries.

A second round of tariff negotiations was held at Annecy, France, in 1949. Agreements were concluded with ten additional nations, raising the number subscribing to the General Agreement on Tariffs and Trade to 33. At Annecy, the U. S. granted tariff concessions on about 400 items, representing 3 per cent of total imports.

The U. S. will participate in a third round of tariff cuts at a conference to be held at Torquay, England, in September, 1950. Negotiations are scheduled with 24

other nations, and the U. S. has listed about 2,900 items on which concessions may be offered.

Through the trade-agreements program, the incidence of the U. S. tariff has been greatly reduced. Tariffs on imports of dutiable goods, which averaged 53 per cent in 1930-33 under rates established by the

Hawley-Smoot Act, have been reduced to an estimated 15 per cent. This figure does not reflect the concessions granted at Ancon or those which may be negotiated at Torquay. Despite the concessions granted, however, rates on many products, particularly manufactured goods, remain so high as to make sales in the U. S. difficult.

The Reciprocal Trade Agreements Act under which U. S. tariff negotiations are conducted was originally passed in 1934 and was last extended in 1949 for a three-year period. Under the provisions of the Act, the President is authorized to seek concessions from foreign countries for

TABLE XIV

Par Values of Member Currencies*

Source: International Monetary Fund.

Member	Currency	U. S. cents per currency unit	Currency units per U. S. dollar
Australia.....	Pound	224.000	.446 429
Austria.....	Schilling	†	†
Belgium.....	Franc	2.000 00	50.000 0
Bolivia.....	Boliviano	1.666 67	60.000 0
Brazil.....	Cruzeiro	5.405 41	18.500 0
Canada.....	Dollar	90.909 1	1.100 00
Chile.....	Peso	3.225 81	31.000 0
China.....	Yuan	†	†
Colombia.....	Peso	51.282 5	1.949 98
Costa Rica.....	Colón	17.809 4	5.615 00
Cuba.....	Peso	100.000	1.000 00
Czechoslovakia.....	Koruna	2.000 00	50.000 0
Denmark.....	Krone	14.477 8	6.907 14
Dominican Republic.....	Peso	100.000	1.000 00
Ecuador.....	Sucré	7.407 41	13.500 0
Egypt.....	Pound	287.156	.348 242
El Salvador.....	Colón	40.000 0	2.500 00
Ethiopia.....	Dollar	40.250 0	2.484 47
Finland.....	Markka	†	†
France.....	Franc	†	†
Greece.....	Drachma	†	†
Guatemala.....	Quetzal	100.000	1.000 00
Honduras.....	Lempira	50.000 0	2.000 00
Iceland.....	Króna	6.140 36	16.285 7
India.....	Ruppee	21.000 0	4.761 90
Iran.....	Rial	3.100 78	32.250 0
Iraq.....	Dinar	280.000	.357 143
Italy.....	Lira	†	†
Lebanon.....	Pound	45.631 3	2.191 48
Luxemburg.....	Franc	2.000 00	50.000 0
Mexico.....	Peso	11.560 7	8.650 00
Netherlands.....	Guilder	26.315 8	3.800 00
Nicaragua.....	Córdoba	20.000 0	5.000 00
Norway.....	Krone	14.000 0	7.142 86
Pakistan.....	Ruppee	†	†
Panama.....	Balboa	100.000	1.000 00
Paraguay.....	Guarani	32.362 5	3.090 00
Peru.....	Sol	.....	.....
Philippines.....	Peso	50.000 0	2.000 00
Syria.....	Pound	45.631 3	2.191 48
Thailand.....	Baht	†	†
Turkey.....	Lira(pound)	35.714 3	2.800 00
Union of South Africa.....	Pound	280.000	.357 143
United Kingdom.....	Pound	280.000	.357 143
United States.....	Dollar	100.000	1.000 00
Uruguay.....	Peso	†	†
Venezuela.....	Bolivar	29.850 7	3.350 00
Yugoslavia.....	Dinar	2.000 00	50.000 0

* As of July 15, 1950. † Par value not yet established. Since Jan. 26, 1948, no par value agreed with Fund. In Nov., 1949, Peru introduced a new exchange system under which the par value of 6.50 soles per U. S. dollar, agreed on Dec. 18, 1946, will no longer govern its transactions. No new par value has been proposed to the Fund.

TABLE XV

U. S. Trade Agreements Signed

Country	Signed	Effective
Argentina.....	Oct. 14, 1941	Nov. 15, 1941
Australia.....	Oct. 30, 1947	Jan. 1, 1948
Belgium.....	Oct. 30, 1947	Jan. 1, 1948
Brazil.....	Oct. 30, 1947	July 31, 1948
Burma.....	Oct. 30, 1947	July 30, 1948
Canada.....	Oct. 30, 1947	Jan. 1, 1948
Ceylon.....	Oct. 30, 1947	July 30, 1948
Chile.....	Oct. 30, 1947	March 16, 1949
China.....	Terminated	.....
Colombia.....	Sept. 13, 1935	May 20, 1936
Costa Rica.....	Nov. 28, 1936	Aug. 2, 1937
Cuba.....	Oct. 30, 1947	Jan. 1, 1948
Czechoslovakia.....	Oct. 30, 1947	April 21, 1948
Denmark.....	Oct. 10, 1949	May 28, 1950
Dominican Republic.....	Oct. 10, 1949	May 19, 1950
Ecuador.....	Aug. 6, 1938	Oct. 23, 1938
El Salvador.....	Feb. 19, 1937	May 31, 1937
Finland.....	Oct. 10, 1949	May 25, 1950
France.....	Oct. 30, 1947	Jan. 1, 1948
Greece.....	Oct. 10, 1949	March 9, 1950
Guatemala.....	April 24, 1936	June 15, 1936
Haiti.....	Oct. 10, 1949	Jan. 1, 1950
Honduras.....	Dec. 13, 1935	March 2, 1936
Iceland.....	Aug. 27, 1943	Nov. 19, 1943
India.....	Oct. 30, 1947	July 9, 1948
Iran.....	April 8, 1943	June 28, 1944
Italy.....	Oct. 10, 1949	May 30, 1950
Lebanon.....	Oct. 30, 1947	July 30, 1948
Liberia.....	Oct. 10, 1949	May 20, 1950
Luxemburg.....	Oct. 30, 1947	Jan. 1, 1948
Mexico.....	Terminated	.....
Netherlands.....	Oct. 30, 1947	Jan. 1, 1948
New Zealand.....	Oct. 30, 1947	July 31, 1948
Nicaragua.....	Oct. 10, 1949	May 28, 1950
Norway.....	Oct. 30, 1947	July 11, 1948
Pakistan.....	Oct. 30, 1947	July 31, 1948
Paraguay.....	Sept. 12, 1946	April 9, 1947
Peru.....	May 7, 1942	July 29, 1942
Southern Rhodesia.....	Oct. 30, 1947	July 12, 1948
Sweden.....	Oct. 10, 1949	May 1, 1950
Switzerland.....	Jan. 9, 1936	Feb. 15, 1936
Syria.....	Oct. 30, 1947	July 31, 1948
Turkey.....	April 1, 1939	May 5, 1939
Union of South Africa.....	Oct. 30, 1947	June 14, 1948
United Kingdom.....	Oct. 30, 1947	Jan. 1, 1948
Uruguay.....	Oct. 10, 1949	Not ratified
Venezuela.....	Nov. 6, 1939	Dec. 16, 1939

* The duty concessions and certain other provisions of the agreement ceased to be in force as of March 10, 1938.

American trade and commerce in return for similar concessions granted their products by the United States. The President has the power to increase or decrease tariff rates (since the 1945 extension, those in effect on January 1, 1945) by 50 per cent. The 1949 extension of the Act eliminated the requirement that the Tariff Commission must advise the President on the limits beyond which concessions could not be made without endangering United States industry. The so-called "peril points" requirement had been written into the 1948 one-year extension of the Act.

Since 1934, reciprocal trade agreements have been concluded with 47 nations (see Table XV), with which we did almost 80 per cent of our normal foreign trade and which includes eight of our ten best customers in 1937. The agreement with Mexico, however, has been terminated, effective Jan. 1, 1951.

Led by the United States, representatives of 53 nations signed the charter of the International Trade Organization in Havana on March 24, 1948. The charter provides a set of rules under which world trade is to be conducted on a freer, non-discriminatory basis. It seeks to outlaw economic warfare between nations. The

charter provides that a U. N. agency, the International Trade Organization, is to be set up to administer the rules.

The charter contains 106 articles divided among 9 chapters. Nations adhering to the charter agree, subject to specified exceptions, to take appropriate action to maintain full employment; to avoid discrimination against the trade of other signatory countries; to reduce tariffs and other barriers to trade; to eliminate quotas and other quantitative restrictions on trade; to curb activities of cartels; to simplify customs regulations and other administrative barriers to trade; and to conduct state trading activities in accordance with commercial principles. The charter also makes provision for international co-operation to develop industrially backward areas and sets up principles governing the negotiation and operation of international commodity agreements.

The charter will become effective 60 days after the twentieth country ratifies the document. Up to August, 1950, only three countries had ratified, and Congress had not yet acted on U. S. ratification. The charter may, however, be made effective as between the countries which have ratified it, if they so desire.

LABOR LEGISLATION IN 1950

Changes in the federal Wage-Hour Law went into effect Jan. 25, 1950, as a result of the legislation which Congress passed in November, 1949. The primary aim of the new law was to boost minimum-wage rates. But it also undertook to clarify interpretations which had been made under the old law by the federal Wage-Hour Administrator and the courts. In some situations this meant tightening up the law and liberalizing it in still other respects. These are the most important changes:

1. Minimum wage is raised from 40¢ an hour to 75¢ an hour.

2. Basic test for coverage. The new law covers only those in a "closely related process or occupation directly essential" to interstate production. The old law covered employees whose work was "necessary" to interstate production. The new definition probably will exempt such workers as those employed by window-cleaning companies, local nursery companies, employees of local architects, etc.

3. The retail exemption removes from Wage-Hour coverage about 300,000 workers as a result of a redefinition of retail sales.

4. The new law also provides exemptions for many activities not mentioned in the old act; including newspaper deliveries; poultry, eggs, milk, cream; certain small telegraph agencies; taxicab companies,

5. Certain exemptions are also granted under union contracts which provide for annual employment guarantees of up to 2,240 hours of work.

6. The rules governing employment of child labor are tightened.

7. The new law makes certain changes in the computation of regular rate of pay so that employers need not figure premium pay in computing the regular rate.

8. Wage suits against employers. The new law allows the federal Wage-Hour Administrator to sue for back pay for employees. The old act had no such provision.

Taft-Hartley Law

Following are the significant provisions of the Taft-Hartley Law:

1. *National Labor Relations Board.* The agency consists of five members. A new general counsel is invested with the authority to handle election and unfair labor practice proceedings.

2. *Union Security.* The closed shop is banned. The union shop and other forms of union security are closely regulated by means of NLRB conducted elections.

3. *Union Unfair Labor Practices.* For the first time unions are chargeable with unfair labor practices. These include coercion of employees in the choice of a bargaining

agent; union attempts to discriminate against employees for dual union activities at permissible times; union refusal to bargain with an employer; and participation by the union in jurisdictional strikes or secondary boycotts.

4. *Suits Against Unions.* Unions may be sued in federal courts, regardless of the amount involved and whether or not there is a diversity of citizenship. The principal basis of the suits are damages suffered as a result of violation of a collective bargaining agreement and of union participation in jurisdictional strikes or secondary boycotts.

5. *Collective Bargaining.* Collective bargaining rights of employees guaranteed by the Wagner Act remain unchanged. But the obligations of employers are more closely specified. Employers are permitted to petition NLRB for elections where they believe, in good faith, that the union no longer represents a majority. Employees may petition for an election to have their union "decertified."

6. *Negotiations and Cooling-Off Period.* Unions and employers are not permitted to terminate or modify a contract without giving the other party 60 days' notice of such intention and without following certain notice and conference requirements.

7. *Freedom of Speech.* The right of an employer to state his views or arguments against unions is clarified by the new law. For instance, an employer may now make anti-union statements so long as they do not contain any threat of economic reprisal or offers of benefit.

8. *Supervisors.* Supervisors are denied the protections they formerly had under the Wagner Act. Employers no longer need bargain with supervisors' unions.

9. *National Emergency Strikes.* The Federal Government is authorized to protect the public where an industry-wide strike affects the national health and safety. Where there is a threat of such a strike, the President may direct the Attorney General to seek an injunction which may continue in force for as long as eighty days. Employees are given the opportunity

to vote by secret ballot on acceptance or rejection of the employer's last offer of settlement.

10. *Checkoff.* Deduction of union dues from employee's pay is not permitted unless employee gives written authorization.

Proposed Changes

Senator Taft, one of the original sponsors of the 1947 law, indicated in 1949 that he was willing to amend his original statute in a number of respects. Here are some of the salient changes which he proposed which would have softened the statute substantially:

1. Redefinition of foremen to exempt fewer supervisors from NLRB recognition.

2. Cut down union responsibility for the acts of its agents and wildcatters.

3. Elimination of the independent status of NLRB General Counsel.

4. Elimination of union shop elections; continued prohibition of the closed shop, but restoration of hiring hall practices.

5. Legalization of secondary boycotts against "struck work."

6. Right of striking employees to vote in union elections.

7. Right of unions to make political expenditures, such as advertising and printing political pamphlets.

1950 Campaign Issues

During 1949 and continuing through the early months of 1950, organized labor showed every indication that it would continue to raise the Taft-Hartley Law as a campaign issue. Changing events during the year reduced the emphasis on this Law as an election issue. Nevertheless, as a matter of policy, organized labor continued to voice its opposition to the Law and its backers in Congress. Principally, the outbreak of the Korean War shifted the stress to labor's demand for participation in decisions made by government and management with respect to manpower, wage and price controls, as well as to changes in individual income taxes and corporate excess-profits taxes.

Terms Used in Labor Relations

ARBITRATION—Referring disputes between employers and employees to the binding decision of impartial referees, arbitrators, or umpires.

BARGAINING UNIT—A group of employees composed of workers in a single craft, plant, company, area, or industry for purpose of bargaining collectively with their employer or employers. Such units may be determined by traditional grouping of workers, or by NLRB or a state labor relations board.

BOYCOTT—A concerted effort by a union

to withhold or induce others to withhold the purchase of goods or services of an employer involved in a labor dispute. *Secondary boycotts* generally apply to union efforts to induce parties not directly involved in a labor dispute to refrain from patronizing the employer with whom the union has a labor dispute.

CERTIFICATION—An official order of the National Labor Relations Board, the National Mediation Board, or a state labor relations board specifying that a union is free from employer domination, includes a

majority of the employees in an appropriate unit in its membership, and is authorized to act as the collective bargaining agent for all the employees in the unit.

CHECKOFF—Employer deduction of union dues from the pay envelope of union members and payment of the funds to the union.

CLOSED SHOP—An employer may hire only members of the contracting union who must continue to remain members in good standing to keep their jobs.

CLOSED UNION—A union which, through high initiation fees or restrictive membership rules, seeks to limit the size of its membership in order to protect their job opportunities. (See *Union shop*.)

COLLECTIVE BARGAINING—The process of negotiation between employer and union for the purpose of reaching an agreement as to the terms and conditions of employment for a specified period.

COMPANY UNION—An employee organization whose membership is limited to the employees of a single plant or company. The term is frequently used to denote a company-dominated union, now illegal under the Wagner Act.

CRAFT UNION—Jurisdiction limited to one or several allied skilled trades.

EMPLOYEE WELFARE FUNDS—Funds consisting of employer or joint employer-employee contributions based upon percentage of payroll or number of units produced, used in behalf of union members for health insurance, hospitalization, vacations, disability, and retirement. Administration of the fund may be by union, employer, or jointly.

FEATHERBEDDING—Union work rules which limit output or utilization of manpower of machines.

ILLEGAL STRIKE—A work stoppage by union members in violation of a no-strike clause, or one which has not been properly voted upon or authorized by the proper union officials.

JURISDICTIONAL DISPUTE—A dispute between two or more unions over the right to organize the employees in a particular trade, industry or plant.

LOCKOUT—A shutdown of operations by an employer to secure acceptance of his terms or in protest against union demands.

MAINTENANCE OF MEMBERSHIP—Employees who are union members at the time the contract is signed and those who subsequently join the union must continue their membership as a condition of continued employment during the contract term.

MEDIATION—The process of attempting to reach a settlement or an agreement through the efforts of an outside person or agency such as the U. S. Conciliation Service.

OPEN SHOP—Union membership is not a condition of employment.

PICKETING—Stationing one or more persons of a labor organization at the plant gates or shop doors of an employer during a labor dispute for the purpose of informing the public generally and the employees that a dispute exists, persuading workers to join or continue a strike, and preventing persons from entering or going to work. If large numbers participate in parading or walking up and down in front of the struck premises, this is known as *mass picketing*.

SENIORITY—Job rights based on length of service; measured in relation to other employees, to a particular job or to employment in a department, division, plant, or company.

SHOP STEWARD—A person elected by the employees within a plant or department to represent them in the adjustment of grievances with the employer.

STRIKE—A temporary work stoppage by employees as a form of economic pressure to enforce a demand for wage increases, improved working conditions, or to secure action on a grievance.

UNFAIR LABOR PRACTICES—*By employers.* (1) Interference by employer with, restraint, or coercion of employees in the exercise of their right to self-organization and collective bargaining. (2) Employer domination or interference with the formation or administration of any labor organization or grant of financial or other support. (3) Discrimination in regard to hire or tenure of employment or any term or condition of employment by an employer in order to encourage or discourage membership in any labor organization. (4) The discharge or discrimination of an employee who files charges or gives testimony under the Act. (5) Refusal to bargain collectively with the representatives of employees.

By unions. (1) Restraining or coercing employees in the exercise of their Wagner Act rights. (2) Charging excessive initiation fees. (3) Persuading an employer to discriminate against employees. (4) Refusing to bargain collectively. (5) Participation in secondary boycotts and jurisdictional disputes. (6) Strikes by minority unions against certified unions. (7) Requiring payment for services not rendered. (8) Coercing an employer in his selection of his bargaining representatives.

UNION SECURITY—The closed or union shop or maintenance of membership. (See each term.)

UNION SHOP—All employees after hiring or within a specified period must become and remain members of a union.

WORKMEN'S COMPENSATION—Insurance systems established by law in various

states providing payment to workers who suffer physical injury during their course of employment, irrespective of carelessness of worker or negligence of employer.

YELLOW-DOG CONTRACT—An agreement signed by an employee with his em-

ployer as a condition of employment setting forth the employee's promise that he would not join a labor union or otherwise participate in any concerted action. Such contracts are now outlawed by the NLRB under the terms of the Wagner Act.

Directory of Government Labor Agencies

DEPARTMENT OF LABOR—Principal operating units are: The Bureau of Labor Statistics, Bureau of Labor Standards, Wage and Hour and Public Contracts Divisions, Women's Bureau. Principal offices—Labor Department Building, Constitution Avenue at 14th Street, N. W., Washington, D. C. Secretary of Labor, Maurice J. Tobin.

1. **Bureau of Labor Statistics:** Acquires and distributes labor information and publishes the results of special studies on various aspects of the labor field, such as wages in different industries; effects of the war on employment, production, and labor conditions; productivity of labor and industry; and industrial relations. This information is issued in special bulletins and in the Monthly Labor Review. The Bureau maintains five Regional Offices throughout the country with its principal office in the Labor Department Building, Wash., D. C. Commissioner: Evan Clague.

2. **Bureau of Labor Standards:** Established in 1934 to develop desirable labor standards in industrial practice, labor law administration and labor legislation, and to make specific recommendations concerning methods and measures designed to improve the working conditions and the economic position of wage earners. Director: William L. Connolly.

3. **Wage and Hour and Public Contracts Divisions:** Enforce minimum wage and overtime pay requirements of Federal laws. There are nine regional offices throughout the country and three territorial offices, which carry out the inspection work of the Divisions. Administrator: William R. McComb.

4. **Women's Bureau:** Charged with formulating standards and policies for promoting the welfare of wage-earning women, improving their working conditions, increas-

ing their efficiency, and advancing their opportunities for profitable employment. Chief of the Bureau: Frieda S. Miller, Dept. of Labor Bldg., Wash., D. C.

Mediation and Conciliation Service—An independent agency under the direction of a Federal Conciliation and Mediation Director appointed by the President with the advice and consent of the Senate. The main office of the Service is in the Department of Labor Building. Cyrus S. Ching is the present director.

National Labor Relations Board—Principal office: Federal Security Bldg., South, "C" St., S.W., Washington, D. C. The Taft-Hartley Law expanded the Board to five members: Paul M. Herzog, Chairman, John M. Houston and James J. Reynolds, Jr., all holdovers from the old NLRB. Additional members nominated for appointment by the President are Paul L. Styles and Abe Murdock. The Board maintains 22 regional offices.

National Mediation Board—Composed of three members appointed by the President, not more than two of whom may belong to the same political party. The Board investigates disputes over representation and mediates disputes concerning changes in rates of pay, rules or working conditions of employees subject to the Railway Labor Act. Principal office: General Services Administration Bldg., 18th and F Streets, N.W., Wash., D. C.

The Board is composed of Francis A. O'Neill, Jr., John Thad Scott, Jr., and Leverett Edwards. (See *Labor Legislation*.)

National Railroad Adjustment Board—Settles grievances and disputes arising out of interpretation of agreements concerning pay, rules or working conditions.

The Chairman of this Board is C. E. Peck; the vice chairman is H. J. Carr.

Labor Organizations

THE AMERICAN FEDERATION OF LABOR

The American Federation of Labor was founded in 1881 as the Federation of Organized Trades and Labor Unions of the United States and Canada, changing its name in 1886. Its basic approach was to organize workers by crafts and skills, rather than by geographical area as was the practice of the Knights of Labor which the AFL was successful in replacing. The present organizational structure is practically identical with that set up under the leadership of Samuel Gompers, president of the

Cigar Makers International Union. The AFL is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies. The Federation, however, has authority to fix the jurisdiction of its affiliated internationals, though it is not always able to enforce decisions. Federation officers are elected by annual conventions. The governing body between conventions is the Executive Council, elected by the convention.

The AFL now consists of a little more than 107 international unions, claiming a

membership of approximately 8,000,000. Its principal activities are to aid constituent unions in organizing and bargaining, to promote or oppose legislation, litigate test cases in court, watch interpretation and enforcement of laws, represent its affiliates in tripartite government agencies, and act for its membership in international bodies. It also operates through city and state federations, and through councils or departments of allied crafts. The AFL has refrained from tying itself up too closely with any political party or government administration, but it has recognized the need for political education and action by organized labor by establishing in the year 1947 "Labor's League for Political Education." Most constituent AFL unions are craft unions although a number are industrial. By extension into a number of industries some of the original craft unions have become mixed unions. The Brotherhood of Painters, Decorators, and Paper Hangers of America, AFL, is an illustration of a craft union whose jurisdiction includes building construction and maintenance work in establishments in many industries. Address: 901 Massachusetts Ave., N. W., Washington, D. C.

OFFICERS

AND EXECUTIVE COUNCIL OF AFL—1950

William Green, President

George Meany, Secretary-Treasurer

W. L. Hutcheson W. L. McFetridge

Matthew Woll W. C. Birthright

Joseph N. Weber W. C. Doherty

Geo. M. Harrison David Dubinsky

Daniel J. Tobin Charles J. MacGowan

Harry C. Bates Herman Winter

Daniel W. Tracy

CONGRESS OF INDUSTRIAL ORGANIZATIONS

The CIO resulted from a split within the AFL ranks. In order to organize the mass production industries, leaders of the industrial unions within the AFL won approval at the Federation's San Francisco convention in 1934 of a resolution endorsing industrial unionism in the automobile, cement, aluminum, and other mass-production industries. Failure of the AFL to organize the mass-production industries finally brought on a crisis at the 1935 convention at Atlantic City. Less than a month after this convention closed, led by John L. Lewis, Sidney Hillman, and David Dubinsky, the United Mine Workers, the Amalgamated Clothing Workers, the International Ladies Garment Workers Union, the United Textile Workers, the Oil Field, Gas and Refinery Workers, the International Union of Mine, Mill, and Smelter Workers founded the Committee for Industrial Organization. Other industrial unions shortly joined the Committee. In January, 1936, the Executive Council of the AFL ordered the CIO to dissolve and

in August, upon its refusal to do so, suspended the ten unions. Disagreement on the desirability of reunification of labor led the ILGWU to return to the AFL, with John L. Lewis' UMW following suit later.

At present the Congress of Industrial Organizations includes 33 international unions with a claimed membership of approximately 6,000,000. The CIO has emphasized legislation as an aid to organization and collective bargaining drives. It has also formed a Political Action Committee to support candidates seeking public office whom it regards as pro-labor.

The 1949 CIO convention ordered trials to be held by members of the CIO executive board to determine the fate of twelve left-wing unions accused of Communist leadership. As a result the following unions were expelled from the CIO: United Electrical, Radio & Machine Workers; United Farm Equipment & Metal Workers; International Union of Mine, Mill and Smelter Workers; Food, Tobacco, Agricultural and Allied Workers; United Office & Professional Workers of America; United Public Workers; American Communications Association; and the International Fur and Leather Workers. The International Longshoremen's and Warehousemen's Union, National Union of Marine Cooks and Stewards, and International Fishermen and Allied Workers have been tried and decisions are pending. The charges against the United Furniture Workers were withdrawn June 15, 1950, because of the victory of right-wing elements in the recent election. A CIO charter was issued to the newly formed International Union of Electrical, Radio and Machine Workers.

The CIO is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies, as in the AFL. Unlike the AFL, however, the parent organization has greater influence over the decisions of the individual unions. The CIO is governed by a General Executive Board, consisting of a representative from each international union. A smaller body of officers is elected by the annual convention. CIO headquarters: 718 Jackson Pl., Wash. 6, D. C.

OFFICERS OF CIO—1950

Philip Murray	President
Walter P. Reuther	Vice President
L. S. Buckmaster	Vice President
Joseph Curran	Vice President
Joseph A. Belrne	Vice President
John Green	Vice President
Allan S. Haywood	Vice President
Emil Rieve	Vice President
Frank Rosenblum	Vice President
O. A. Knight	Vice President
James B. Carey	Secretary-Treasurer

INDEPENDENT UNIONS—It is generally estimated that 2,500,000 workers are or-

ganized in 69 independent unions, many of them operating as company- or plant-wide unions. Some are loosely united in the Confederated Unions of America, whose central headquarters are located at 809 "I" Street, N. W., Washington, D. C. The most important of the independents, however, are organized much like the international unions of the AFL and CIO, some of them having withdrawn from the AFL.

1. **Railroad Brotherhoods.** The most prominent of the railroad unions are the four independent train service unions, commonly referred to as the "Brotherhoods." Labor organization in the railroads is predominantly along craft or occupational lines. The "Big Four" unaffiliated unions represent craft elements in the industry. They include the Brotherhood of Locomotive Firemen and Enginemen, Brotherhood of Railroad Trainmen, Grand International Brotherhood of Locomotive Engineers, and the Order of Railway Conductors of America. Membership figures for the "Big Four" unaffiliated unions are as follows: Railway Conductors—37,562; Locomotive Firemen and Enginemen—102,932; Railroad Trainmen—210,624; Locomotive Engineers—79,667. The Engineers and the Firemen and Enginemen were voting heavily in favor of a merger of their two organizations in mid-1949. All told, there are about 1,400,000 employees on Class 1 railroads and some 23 so-called standard railroad unions. All except about 70,000 employees are covered by union agreements, so that approximately 95 per cent were employed under contracts.

The railroad unions, except for the Railroad Trainmen and the Locomotive Engineers, attempt some form of united action through the Railway Labor Executives Assn., which includes some AFL unions.

2. **International Association of Machinists.** Claiming a membership of 581,938, was formerly affiliated with the AFL. After one withdrawal it was readmitted, during

the 1944 convention, but withdrew again in 1946 as a result of a jurisdictional dispute with the Brotherhood of Carpenters and the Sheet Metal Workers International Association. IAM Hqts. are at 9th St. and Mt. Vernon Pl., N. W., Washington, D. C.

3. **Foreman's Association of America.** The organization of supervisors became an active issue after the effective organization of production workers by the newly organized industrial unions. In 1941, foremen from numerous Detroit automobile plants organized an independent union, the Foreman's Association of America, which later expanded its membership into other industries and areas. FAA obtained a contract from the Ford Motor Company in 1943 but met with resistance from other auto manufacturers. Organizational activities were aided by the decision of the National Labor Relations Board in 1945, holding that foremen were entitled to bargain collectively under the Wagner Act.

This trend was reversed by passage of the Taft-Hartley Law in June, 1947. By amendment of the Wagner Act, it eliminated supervisors from the statutory definition of employee, thereby denying organizational protection and mandatory collective bargaining rights to classes of supervisory employees. Shortly after this happened, FAA lost 13 of its chapters, including its largest group, at Packard. The union now claims 19,642 members with 92 chapters. Its headquarters are located at 1627 Cadillac Tower, Detroit, Mich.

4. **United Mine Workers.** On December 12, 1947 John L. Lewis took his United Mine Workers out of the AFL with the statement to President William Green: "We disaffiliate." The split arose over the refusal of the AFL Executive Board to adopt Lewis' proposal that the members refuse to honor the Taft-Hartley Act affidavit requirements. UMW membership is estimated at 600,000. Headquarters: 900 15th Street, N. W., Washington 5, D. C.

State Labor Relations Laws

At the November, 1948, elections, Arizona voters approved an anti-closed shop measure, while the same proposal was defeated in Maine and Massachusetts.

Uncertainty about changes in the national law caused most state legislatures to mark time in 1949.

The New Hampshire legislature eliminated its union security prohibition, while "Little Taft-Hartley" acts were repealed by Delaware and Missouri. The Nevada Supreme Court ruled that the broad wording of a law prohibiting "yellow dog" contracts did not ban the closed shop in that state.

Decisions of the U. S. Supreme Court upheld union security prohibitions in Arizona, Nebraska, and North Carolina were upheld. The Wisconsin Board was allowed

to regulate intermittent strikes in an industry subject to Federal law. Missouri was permitted to enjoin peaceful picketing that forces an employer to violate state anti-trust laws.

There was some general chipping at state laws regulating picketing. In Pennsylvania, the highest court found unconstitutional its state law against "stranger" picketing; and in Texas, the state Supreme Court ruled that the right to picket couldn't be taken from a minority employee group. Nebraska repealed one set of picketing regulations, substituting a simpler, more comprehensive mass picketing ban. One New York court suggested that the Taft-Hartley secondary boycott ban had eased the way for state injunction previously forbidden under the "free speech" doctrine.

Membership of Leading American Labor Unions

Source: Bureau of Labor Statistics.

Name of Union	Affiliation	Number of members ²	Date
Amalgamated Clothing Workers.....	CIO	375,000	1949
Amalgamated Meat Cutters and Butcher Workmen.....	AFL	175,000	1949
American Federation of Musicians.....	AFL	237,000	1949
Bakery and Confection Workers' International Union.....	AFL	170,000	1949
Brotherhood of Locomotive Firemen and Enginemen.....	Ind.	102,932	1949
Brotherhood of Maintenance of Way Employees.....	AFL	171,356	1949
Brotherhood of Painters, Decorators, and Paperhangers.....	AFL	178,000	1949
Brotherhood of Railroad Trainmen.....	Ind.	210,624	1949
Brotherhood of Railway and Steamship Clerks.....	AFL	350,000 ²	1949
Building Service Employees' International Union.....	AFL	173,019	1949
Communications Workers of America.....	CIO	240,000	1949
Hotel & Restaurant Employees' International Alliance.....	AFL	400,000	1949
Industrial Union of Marine & Shipbuilding Workers.....	CIO	86,603 ²	1948
International Association of Machinists.....	Ind.	581,938	1949
International Brotherhood of Boilermakers.....	AFL	150,000 ²	1948
International Brotherhood of Electrical Workers.....	AFL	450,000	1949
International Brotherhood of Teamsters.....	AFL	1,103,000	1949
International Hod Carriers', Building, and Common Laborers' Union.....	AFL	267,500 ²	1949
International Ladies' Garment Workers' Union.....	AFL	423,010 ²	1949
International Union of Mine, Mill, and Smelter Workers.....	Ind. ⁴	91,400	1949
International Union of Electrical, Radio & Machine Workers.....	CIO	(⁵)	....
Retail, Wholesale, and Department Store Union.....	CIO	65,000	1949
Textile Workers Union.....	CIO	373,770	1949
United Association of Plumbers and Steam Fitters.....	AFL	180,000	1949
United Automobile, Aircraft, & Agricultural Implement Workers.....	CIO	947,598	1949
United Brotherhood of Carpenters and Joiners.....	AFL	735,000	1949
United Electrical, Radio and Machine Workers.....	Ind. ⁴	(⁵)	....
United Mine Workers.....	Ind.	600,000	1949
United Rubber, Cork, Linoleum and Plastic Workers.....	CIO	150,070	1949
United Steelworkers.....	CIO	960,738 ²	1949

¹ Unless otherwise indicated, average dues-paying membership for first half of 1949 as submitted directly to Bureau of Labor Statistics on questionnaire. ² Date appearing on union's journal or reports. ³ Per capita average annual membership as published in convention proceedings of AFL. ⁴ Expelled from CIO for Communist activity. ⁵ Membership figure not available.

Fair Employment Practice Laws

Discrimination in hiring, job tenure, or conditions of employment because of race, color, creed or national origin, is forbidden by the laws of these states: Connecticut, Indiana, Massachusetts, New Jersey, New

Mexico, New York, Oregon, Rhode Island, Washington and Wisconsin.

The following cities also have ordinances: Chicago, Cleveland, Milwaukee, Minneapolis, Philadelphia, Youngstown.

Social Security

The Social Security Act, enacted Aug. 14, 1935, and amended in 1939 and 1950, has eleven separate programs. Two are insurance systems involving pay-roll taxes: federal old-age and survivors' insurance and federal-state unemployment insurance. The other nine involve federal grants-in-aid to the states for needy persons who are aged, blind, or permanently disabled, and for dependent children; maternal and child-health services; crippled-children services; child-welfare services; public-health services; and vocational rehabilitation.

The administration of the Act is the responsibility of the Federal Security Administrator. Within the Federal Security Agency, the Social Security Administration, headed by Commissioner for Social Security, administers most of the programs.

The 1950 amendments nearly doubled benefits, made them payable to many more people, and extended coverage to 10,000,000 more persons.

Old-Age and Survivors' Insurance

The old-age and survivors' insurance program began in 1937, although only old-age lump-sum benefits were paid before 1940. It is the only wholly federal program.

Benefits

Benefits available to workers who are "fully insured" under the system are:

1. A monthly retirement benefit for a worker 65 or over.

2. A supplemental monthly benefit for a retired worker's wife, if she is 65 or over, or at any age if she has dependent children under 18 in her care; and for his children if under 18.

TABLE NO. 1: Examples of Life-Insurance and Retirement Benefits
(Assuming 10 years' coverage)

Type of benefit	Average monthly wage					
	\$50	\$100	\$150	\$200	\$250	\$300
LIFE-INSURANCE BENEFITS:						
Widow and 1 child:						
Before Sept., 1950.....	\$ 27.50	\$ 34.37	\$ 41.25	\$ 48.12	\$ 55.00	\$ 55.00
Sept., 1950-June, 1952.....	40.00*	75.00	85.80	93.30	101.40	101.40
July, 1952, and after.....	40.00*	75.00	86.20	97.50	108.74	120.00
Widow and 2 children:						
Before Sept., 1950.....	38.50	45.00*	57.75	67.37	77.00	77.00
Sept., 1950-June, 1952.....	40.00*	80.00*	114.40	124.41	135.20	135.20
July, 1952, and after.....	40.00*	80.00*	115.00	130.00	145.00	150.00*
Burial payment:						
Before Sept., 1950.....	132.00	165.00	198.00	231.00	264.00	264.00
Sept., 1950-June, 1952.....	120.60	150.00	171.60	186.60	202.80	202.80
July, 1952, and after.....	120.60	150.00	172.50	195.00	217.50	240.00
RETIREMENT BENEFITS:						
Retired worker:						
Before Sept., 1950.....	22.00	27.50	33.00	38.50	44.00	44.00
Sept., 1950-June, 1952.....	40.00*	50.00	57.20	62.20	67.60	67.60
July, 1952, and after.....	40.00*	50.00	57.50	65.00	72.50	80.00
Wife or dependent husband:						
Before Sept., 1950.....	11.00	13.75	16.50	19.25	22.00	22.00
Sept., 1950-June, 1952.....	.....*	25.00	28.60	31.10	33.80	33.80
July, 1952, and after.....	.....*	25.00	28.75	32.50	36.25	40.00

* Reduced by ceiling.

3. Monthly benefits to the following survivors of a deceased worker, regardless of his age at death: (a) Widow, if 65 or over; (b) Widow or divorced wife at any age if she has dependent children in her care; (c) Children, unmarried and under 18; (d) Parents, if 65 or over and dependent on the deceased, but only if the worker dies leaving no widow or child entitled to benefits.

4. A lump-sum benefit, which is paid the widow or widower, if he or she was living with the deceased at the time of death. If there is no such person, the persons paying the worker's burial expenses may be reimbursed for expenses paid. Lump-sum benefits can be paid under the above circumstances even if the worker was drawing old-age benefits before his death and his wife or child were also receiving benefits on his wages. Furthermore, the lump sum is not in place of monthly benefits payable later to survivors and does not affect their rights to monthly benefits.

Workers who are not "fully" insured but are merely "currently" insured are entitled only to those benefits for survivors listed under 3 (b), 3 (c), and 4 above.

Dependent husbands of working wives may receive a supplemental retirement benefit or a widower's benefit after 65, but only if the wife was both currently and fully insured. Children of working mothers may draw benefits on her wages, even if the father is present in the household, when

the mother was currently and fully insured.

A worker is "fully" insured if he has been paid \$50 in taxable employment in each of 40 quarters, or if he has worked in taxable jobs half the quarters after 1950 (or after becoming 21, if later) and before he reaches 65 or dies (at least 6 quarters are needed). (See Table 1A.)

A worker is "currently" insured if he has received wages of at least \$50 in taxable employment in at least 6 of the 13 calendar quarters preceding and including the quarter in which he died.

Benefits to people now drawing them are raised on an average of 77½%, according to a conversion table (Table 1B). Benefits to people filing claims before May, 1952, will be figured as for people now drawing benefits, and therefore subject to the same 77½% increase. Benefits to people with 1½ years of work after 1950 will be figured by either the new formula or the old (plus conversion table), whichever is more favorable. But those under 21 will use the new formula only.

The amount of the worker's primary benefit—that paid to the worker when he reaches 65—is determined as follows:

Workers who do not have 6 quarters with wages of \$50 after 1950:

(1.) Figure the worker's "average monthly wage" by dividing his total taxable wages by three times the quarters

elapsed since January 1, 1937. (Since time elapsed is a factor, a person who has worked continuously in covered employment will receive a larger benefit than one who has worked in exempt employment part of the time or has been unemployed.)

(2.) Take 40% of the first \$50 of the average monthly wage and add to it 10% of the remainder (not exceeding \$200, however). Then add to this sum 1% for each year in which the worker received at least \$200 in covered employment. The 1% increase applies only to years before 1951. If the resulting sum is less than \$10, it is increased to \$10.

(3.) Use the conversion table (Table 1B) to increase the monthly benefit.

Example: A worker was paid \$3,000 a year for the years 1937 through 1950. He retires at the end of 1950 and becomes 65 in July, 1951. His monthly retirement benefit is computed as follows:

(a) His average monthly wage is \$241.38 (total wages \$42,000 divided by 3 times the quarters between 1937 and July, 1951, or 174).

(b) His benefit under the old law is \$44.59; i.e., \$20.00 (40% of \$50) plus \$19.13 (10% of \$191.38) plus \$5.46 (1% x \$9.13 x 14 yrs.).

(c) His benefit under the new law (see Table 1B) is \$68.50.

Workers who have 6 quarters with wages of \$50 after 1950:

The benefit will be figured under either the old or new formula, whichever is more favorable to them. It will be either:

(1.) Computed under the old law and raised by the conversion table; or

(2.) Computed by the new formula, with the average wage figured on a "new start" basis as follows:

"Average monthly wage" is computed by dividing the worker's total taxable wages, beginning with 1951 and ending with the third quarter preceding that in which he is 65, by the number of months in this period (raised to 18 if less than that).

The formula used to compute the monthly benefit is as follows:

(a) If the average monthly wage is \$50 or more, take 50% of the first \$100;

(b) Add 15% of the next \$200. The result is the worker's monthly benefit.

Example: A worker was paid \$3,000 a year for the years 1937 through 1954. He retires at the end of 1954 and is 65 in August, 1955. His monthly retirement

TABLE NO. 1A

Quarters of Coverage Needed to Receive Retirement Benefits

Time of 65th birthday	Quar- ters*	Time of 65th birthday	Quar- ters*	Time of 65th birthday	Quar- ters*	Time of 65th birthday	Quar- ters*
1954 Jan.-June.....	6	1958 July-Dec.....	15	1963 Jan.-June.....	24	1967 July-Dec.....	33
July-Dec.....	7	1959 Jan.-June.....	16	July-Dec.....	25	1968 Jan.-June.....	34
1955 Jan.-June.....	8	July-Dec.....	17	1964 Jan.-June.....	26	July-Dec.....	35
July-Dec.....	9	1960 Jan.-June.....	18	July-Dec.....	27	1969 Jan.-June.....	36
1956 Jan.-June.....	10	July-Dec.....	19	1965 Jan.-June.....	28	July-Dec.....	37
July-Dec.....	11	1961 Jan.-June.....	20	July-Dec.....	29	1970 Jan.-June.....	38
1957 Jan.-June.....	12	July-Dec.....	21	1966 Jan.-June.....	30	July-Dec.....	39
July-Dec.....	13	1962 Jan.-June.....	22	July-Dec.....	31	1971 on.....	40
1958 Jan.-June.....	14	July-Dec.....	23	1967 Jan.-June.....	32		

* With wages of \$50.00.

TABLE NO. 1B

Conversion Table Increasing Monthly Benefits

Benefit before Sept., 1950	Benefit starting Sept., 1950	Benefit before Sept., 1950	Benefit starting Sept., 1950	Benefit before Sept., 1950	Benefit starting Sept., 1950	Benefit before Sept., 1950	Benefit starting Sept., 1950
\$10	\$20.00	\$20	\$37.00	\$30	\$54.00	\$40	\$64.00
11	22.00	21	38.50	31	55.10	41	64.90
12	24.00	22	40.20	32	56.20	42	65.80
13	26.00	23	42.20	33	57.20	43	66.70
14	28.00	24	44.50	34	58.20	44	67.60
15	30.00	25	46.50	35	59.20	45	68.50
16	31.70	26	48.30	36	60.20	46	68.50
17	33.20	27	50.00	37	61.20		
18	34.50	28	51.50	38	62.20		
19	35.70	29	52.80	39	63.10		

benefit is figured under whichever formula will give him the larger benefit.

(1.) Under the old law and the conversion table, the monthly benefit is \$68.50.

(2.) His benefit under the "new start" formula is \$72.50, computed as follows: His total wages for 1951 through 1954 (\$12,000) are divided by the number of months in the period Jan. 1, 1951-Dec. 31, 1954. This gives an "average monthly wage" of \$250. His monthly benefit is figured by taking 50% of \$100 (\$50) and adding 15% of \$150 (\$22.50), resulting in \$72.50.

Since the benefit under the "new start" formula is larger than under the conversion, the "new start" formula is used.

If an employee's "average monthly wage" under the "new start" formula is less than \$50, his monthly benefit is computed as follows (average monthly wage—monthly benefit): \$30 or less—\$20; \$31—\$21; \$32—\$22; \$33—\$23; \$34—\$24; \$35 to \$49—\$25.

A benefit claim may be recomputed later to include subsequent earnings.

The amounts of other benefits are derived from the primary benefit as follows:

Child: retirement benefit of one-half the primary benefit; survivors' benefit of three-fourths the primary benefit (if only 1 child); if several children, each gets one-half, with an additional one-fourth divided among them.

Husband or wife: one-half primary benefit.

Widower or widow: three-fourths primary benefit.

Parent: three-fourths primary benefit.

Lump-sum benefit: 3 times the primary benefit. (If paid to persons paying burial expenses, other than the widow or widower, the benefit is limited to expenses incurred.)

Maximum total of benefits which may be paid on any one worker's wages is the least of the following: \$150 or 80% of the worker's average monthly wage. If benefits are already \$40 or less, they will not be further reduced.

A person earning more than \$50 in a month in covered employment is not eligible for a benefit for that month. Benefits to a wife or child are also canceled during any month in which an insured worker earns more than \$50.

Application for benefits is made to the nearest field office of the Social Security Administration.

Rates and Coverage

All employers covered by the federal insurance contributions law are required to pay a 1½% tax on wages paid to employees, and each employee also pays a 1½% tax on his pay. The rate was raised to 1½% from the original rate of 1% on January 1, 1950. The law calls for another

increase in tax to 2% in 1954 and by gradual steps to 3¼% in 1970.

Neither employer nor employee is required to pay tax on that part of a worker's pay which is over \$3,600 in any calendar year. If an employee does so because he worked for more than one employer, he may apply for a refund of excess tax at the end of the year. (Before 1951, this maximum was \$3,000.)

Although these taxes are initially paid into the Treasury, a corresponding amount is appropriated yearly from the Treasury into the Old-Age and Survivors' Insurance Trust Fund, from which benefits are paid.

An employer is liable for payment and deduction of tax as soon as he employs one employee. The length of employment and the number of employees is immaterial.

The following workers are exempt, and no tax is incurred on their wages: self-employed with income under \$400 a year; irregular agricultural labor; irregular domestics; casual labor not in the course of the employer's business; persons working for a son, daughter or spouse, or for a parent if the child is under 21; international organizations, including U. N., etc.; employees of nonprofit religious, charitable or educational organizations, unless coverage is elected voluntarily; railroad workers; certain employees of organizations exempt from income tax; student nurses and interns; workers on small fishing vessels; newsboys under 18; certain newspaper and magazine vendors.

Amendments to the law in August, 1950, covered for the first time self-employed business men (except farmers and some professionals) and regularly employed farm workers and domestic servants.

Veterans of World War II, who would not otherwise have received wage credits for their time in the service, were in 1946 voted special coverage in the event of death within 3 years after discharge. In such cases they are considered to have died fully insured, to have an average monthly wage of at least \$160, and to have had \$200 annual wages for each year of at least 30 days' active service.

Also, for every month a veteran was in military service between Sept. 16, 1940, and July 24, 1947, he will now automatically be given credit for \$160 in wages. This will help him to qualify for benefits and will go towards the average wage figure on which benefits are based.

Board Wage Records

Every employee must have a social security number. An account with the Social Security Administration is set up for each worker, and to this account are credited all wage payments reported. When a benefit claim is filed, these accounts are used to determine if the claimant is eligible for

benefits and, if he is, the amount of the benefit to be paid.

Unemployment Compensation

Federal and state governments co-operate in the administration of the unemployment insurance program. The federal law, beginning with 1936, imposed an excise tax on employment and established the framework for the federal-state system. All states (including District of Columbia, Hawaii and Alaska) followed suit, most of them in 1936 and 1937. Benefits became payable in most states in 1938 and 1939. (Wisconsin was the only state to pass such a law earlier—taxes were first collected in July, 1934.)

Benefits

The state laws determine who shall receive unemployment benefits, in what amount, and under what conditions. The provisions vary in each state, but generally a person is entitled to benefits for any week during which he is totally or partially unemployed, provided he has earned a sufficient amount of wages from an employer subject to the state law, has filed a claim for benefits, has served a "waiting period" of a week (not required in some states), and is not disqualified.

Disqualification means that the payment of benefits is postponed for a certain number of weeks, or is suspended entirely, because the worker is in one of the following situations:

1. Not able to work—ill, aged or disabled to the point that he cannot perform any marketable services.

2. Not available for work—not willing to do work for which he is fitted by experience, education or training, or places unreasonable restrictions on hours, wages, shift or skill he will accept, with the result that he is not likely to find the job he wants. Many states also require him to be actually searching for a job.

3. Quit work—left his job voluntarily without good cause. "Good cause" is some sound reason which would impel an ordinarily prudent person to quit, such as an unreasonable increase of hours without a pay increase, a substantial reduction in wages, requirement of excessive unpaid overtime, a transfer to work which injures the person's health, an unreasonably heavy work quota, unjustified reprimands or abuse from superior, etc.

4. Discharged for misconduct—discharged because of conduct detrimental to his employer's interests—for example, refusal to obey orders, absence from work, tardiness, violation of employer's rules, intoxication at work, etc.

5. Refused job offer of suitable work without good cause—refused a job which is reasonably fitted to his training, experience, or skills, pays the prevailing wages

for similar work, is not detrimental to his health or safety, has working conditions which are not substantially less favorable than those prevailing in similar work in the locality, and is within a reasonable distance from his home. If the job offer is suitable, the person is expected to accept it unless he has good cause for refusing, such as reasonably good prospects of employment elsewhere, unreasonable conditions required by employer, etc.

6. Involved in labor dispute. Even if the worker is not striking, he may be disqualified if he is a member of the union involved; or his wages, hours or working conditions will be affected by the outcome of the strike; or he serves on or refuses to cross picket lines; or engages in a sympathy strike. In almost all states benefits cannot be paid as long as the dispute persists. Only states where strikers can receive benefits are: New York—after 7 weeks; Rhode Island—after 8 weeks.

Some state laws also disqualify workers who leave because of marriage, marital duties, pregnancy, to attend school, or who receive dismissal pay, vacation pay, workmen's compensation payments, or veterans' readjustment allowances.

A worker seeking unemployment benefits must file a claim at the local office of the state unemployment bureau and register for work with the employment service. At that time, a benefit year (usually the year running from the date of his claim) and a base period (usually the year ending from 3 to 6 months before the filing of his claim) are established for him. His benefit amount will be a percentage of the wages earned in his base period, but no more than the maximum amount allowed. He is entitled to draw benefits for the set number of weeks during the rest

TABLE NO. 2

Old Age and Survivors' Insurance: Summary of Operations (in millions of dollars)

Year	Wage taxes collected	Interest received	Trust fund at end of year	Benefits paid*
1937.....	\$ 493	\$ 2.3	\$ 766	\$ 1.3
1938.....	474	15.4	1,132	10.5
1939.....	568	27.0	1,724	13.9
1940.....	637	42.9	2,031	40.6
1941.....	789	56.2	2,762	93.9
1942.....	1,012	72.3	3,688	137.0
1943.....	1,239	88.3	4,820	172.9
1944.....	1,316	106.7	6,005	218.0
1945.....	1,285	134.3	7,121	273.9
1946.....	1,295	151.6	8,150	378.1
1947.....	1,557	164.2	9,360	466.2
1948.....	1,685	281.2	10,722	556.2
1949.....	1,666	145.0	11,815	667.0

* Only lump-sum payments were made until 1940.

TABLE NO. 3: State Unemployment Compensation Maximums

(corrected to October 1, 1950)

State	Weekly benefit	Duration (in weeks)	State	Weekly benefit	Duration (in weeks)
Alabama.....	\$20	20	Montana.....	\$20	18
Alaska.....	25	25*	Nebraska.....	20	20
Arizona.....	20	12*	Nevada.....	25	26*
Arkansas.....	22	16	New Hampshire.....	25	23
California.....	25	26	New Jersey.....	26	26
Colorado.....	22.75	20	New Mexico.....	20	20
Connecticut.....	24	26*	New York.....	26	26
Delaware.....	25	26	North Carolina.....	25	20
D. C.....	20	20*	North Dakota.....	20	20*
Florida.....	15	16	Ohio.....	25	26*
Georgia.....	20	20	Oklahoma.....	22	22
Hawaii.....	25	20	Oregon.....	25	26
Idaho.....	20	20	Pennsylvania.....	25	24
Illinois.....	25	26	Rhode Island.....	25	26
Indiana.....	20	20	South Carolina.....	20	18
Iowa.....	22.50	20	South Dakota.....	20	20
Kansas.....	27	20	Tennessee.....	20	20
Kentucky.....	20	22	Texas.....	20	24
Louisiana.....	25	20	Utah.....	25	20
Maine.....	25	20	Vermont.....	25	20
Maryland.....	25	26*	Virginia.....	20	16
Massachusetts.....	25	23*	Washington.....	25	26
Michigan.....	24	20*	West Virginia.....	25	23
Minnesota.....	25	25	Wisconsin.....	26	34
Mississippi.....	20	16	Wyoming.....	25	20
Missouri.....	20	20			

* This amount will be increased for unemployed persons with dependents.

of that benefit year. When he has exhausted these benefits he will not be eligible again until he can establish a new benefit year for which he has the necessary base period wages.

An employee moving out of the state does not lose benefit rights earned under that state law. He merely files a claim for benefits at the local office in the state where he is now located and this office will act as agent for the other state in paying him benefits.

Tax

An employer is generally liable for a maximum total tax of 3% of his pay roll—0.3% to the federal government and 2.7%, or less, to the state. Although the federal government itself technically levies a pay-roll tax of 3%, in practice this usually amounts to only 0.3% because the employer is allowed a credit of as much as 2.7% for taxes paid to the states. From this federal tax, funds are appropriated each year to the states to cover administrative costs. Taxes collected by the states are used solely for benefit payments.

Under the federal law, which is merely a taxing statute, the Treasury Department collects the tax, which is paid annually. The state laws, under which benefits are paid, are administered by the various state unemployment insurance agencies.

Only two states require contributions from employers: Ala.—the rate varies from 0.1%

to 1.0% depending on the rate of the employer; N. J.— $\frac{1}{4}$ %.

Merit Rating

All states collect unemployment taxes under "merit rating" systems. These systems allow tax rates lower than the usual standard rate of 2.7% to those employers who have some success in stabilizing employment, provided they have paid the tax for 3 or 4 years. In most states low rates go to employers who have fewest ex-employees drawing unemployment benefits; in others, those employers benefit who have little or no decrease in pay roll.

The average tax rate in merit rating states in 1949 was 1.3%.

Coverage

Employers are liable for the federal tax if they have eight or more employees on some day in each of 20 weeks in a year.

State requirements for liability vary, ranging from eight employees in the state down to a single employee. An employer who has employees in several states may be subject to as many state laws.

Liability for both federal and state taxes is limited to the first \$3,000 of a worker's pay in a year.

Certain employees are exempt from tax under federal and most state laws and are not counted in determining whether an employer is subject to tax. These are self-employed, agricultural workers, domestic workers, members of a proprietor's immediate family, railroad workers, govern-

ment employees, employees of nonprofit educational, charitable or religious organizations, insurance agents, newsboys under 18, student nurses and interns, and casual labor not in the course of an employer's business. Although maritime workers had previously been exempt under the federal law and in some states, the federal law was amended to include them as of July 1, 1946, and coverage is being similarly extended in a growing number of states.

TABLE NO. 4

Total Unemployment Compensation Benefits Under State Laws

Source: Social Security Administration.

Year	Total benefits (in thousands)	Average number of beneficiaries per week
1940.....	\$ 518,700.4	982,392
1941.....	344,320.7	621,065
1942.....	344,084.1	541,495
1943.....	79,643.1	115,454
1944.....	62,384.6	79,306
1945.....	445,865.8	466,550
1946.....	1,095,475.2	1,150,217
1947.....	775,146.0	852,392
1948.....	789,925.0	826,481
1949.....	1,737,279.0	1,889,000

Public Assistance

Under the Social Security Act, federal grants are made to the states for public assistance to needy persons, provided the state plan for distribution of the aid has been approved by the federal government. All states and territories co-operate in old-age assistance plans: all but Alaska co-operate in plans for the needy blind; all but Nevada share in plans for needy children; all states and Puerto Rico have approved plans for maternal and child-health services, services for crippled children, and child-welfare services. Beginning January, 1947, grants for maternal and child-health services may be made to the Virgin Islands. The 1950 amendments authorized plans for the permanently disabled in need, and for direct medical care to those receiving assistance payments.

The federal contribution to the States for assistance to the needy aged and blind now are: \$15 of the first \$20 and 50% of any amount between \$20 and \$50. (The blind are allowed to earn up to \$50 a month and still draw their full assistance payment.) Federal contribution for a dependent child and to the relative with whom the child is living is \$9 of the first \$12, plus one-half of the remainder up to \$27 for the relative and first dependent child in a family. Only those children are eligible who are under 16 (or under 18 and still at school) and who have been deprived of parental support or care and are living with a member of the family.

Social Security for Railroad Workers

Social security for most workers in the railroad transportation industry is provided under a national system apart from that established by the Social Security Act. The Railroad Retirement Act was first passed in 1934, but was held unconstitutional by the Supreme Court. The present Act was passed in 1935 and was substantially amended in 1937 and again in 1946. It is administered by the Railroad Retirement Board.

Taxes supporting the system are collected under the Carriers Taxing Act by the Bureau of Internal Revenue. Taxes are levied on the first \$300 of monthly compensation, on both employers and employees at these rates: 1937-39: 2¼%; 1940-42: 3%; 1943-45: 3½%; 1946: 3½%; 1947-48: 3%; 1949-51: 6%; 1952 on: 6¼%.

Benefits provided are: retirement benefits at 65 or over, and, under certain circumstances, 60; survivors' benefits; disability benefits.

Under the Railroad Insurance Act, also administered by the Railroad Retirement Board, railroad workers receive unemployment insurance, and since July 1, 1947, sickness compensation and maternity benefits. Costs are paid by employers at a rate of ½% of pay roll up to \$300 a month per worker. Rates may increase in ½% gradations to a maximum of 3% according to a scale of rates set by the size of the benefit fund. Taxes are collected by the Board.

Federal Civil Service

The civil-service retirement system, first established in 1920, now provides a retirement system for almost all federal employees not under another plan. It provides for a retirement benefit at 70, or at 62 or 60 or 55, depending on the number of years' service; a disability retirement benefit; a deferred annuity for separated employees with 5 years' or more service when they reach the age of 55 or 62; refunds if service is less than 5 years; death benefit to a wife or dependent child in the amount of the worker's credit in the fund.

In order to finance increased benefit amounts, employees' contributions were raised from 5% to 6%, starting July 1, 1948. The Government's share in the cost of the program also rose from 5% to 6½%.

Health Insurance

For the most part health insurance is maintained on a voluntary basis by group or individual insurance purchased from private insurance companies or from nonprofit organizations. There are, however, these statutory programs:

1. Workmen's compensation laws in every state require employers to insure certain employees for disability incurred in the course of employment.

2. Sickness compensation laws in California, New Jersey, New York and Rhode Island provide for the payment of a cash benefit to partially replaced wages lost through non-occupational illness or injury. The state of Washington's law was held up, subject to a referendum.

3. Almost 5 million civilian employees are paid disability benefits under special public retirement systems.

4. Cash sickness and maternity benefits are paid to railroad workers under the railroad insurance system.

Voluntary insurance is popular in fields of hospitalization costs, accident insurance, medical and surgical care, and pay for time lost from work through sickness.

The largest of the nonprofit plans is the Blue Cross, whose 90 hospital-service plans have over 36,000,000 subscribers throughout the country.

TABLE NO. 5: Public Assistance Payments

(in thousands)

Source: Social Security Administration.

Year	Total	Special types of assistance payments			
		Old-age assistance	Aid to dependent children	Aid to the blind	General assistance
1933.....	\$1,223,779	\$26,071	\$40,504	\$5,839	\$758,752
1934.....	2,380,865	32,244	40,686	7,073	1,200,360
1935.....	2,532,467	64,966	41,727	7,970	1,433,180
1936.....	3,119,013	155,241	49,462	12,813	439,004
1937.....	2,653,918	310,441	71,253	16,171	406,881
1938.....	3,236,600	392,386	97,447	19,154	476,201
1939.....	3,185,447	430,666	114,954	20,437	481,723
1940.....	2,723,408	472,791	132,925	22,703	394,398
1941.....	2,227,527	540,446	153,028	22,785	273,007
1942.....	1,546,241	601,400	158,032	24,495	180,471
1943.....	930,234	653,171	140,942	25,143	110,978
1944.....	942,457	693,338	135,015	25,342	88,762
1945.....	989,686	726,550	149,667	26,557	86,912
1946.....	1,182,587	822,061	208,857	30,748	120,920
1947.....	1,480,774	986,470	294,038	36,198	164,068
1948.....	1,730,505	1,128,190	362,795	41,288	198,232
1949.....	2,174,998	1,372,913	472,371	48,448	281,257

Veterans' Benefits

Mustering-out pay

Veterans—except, in general, those ranking higher than Army captain or Navy lieutenant honorably let out after Pearl Harbor and whose enlistment began before July 1, 1947—get mustering-out pay as follows:

\$100 for those who served less than 60 days.

\$200 for those who served 60 days or more in continental United States.

\$300 for those who served 60 days or more outside continental United States or in Alaska.

If a discharged veteran dies before receiving payment, distribution of mustering-out pay is limited to spouse, children, or parents, in that order.

Job reinstatement

The Selective Service Act expired March 31, 1947. However, Section 8, providing for re-employment of veterans inducted under it continued in effect. Men inducted between March 31, 1947 and June 24, 1948

have job rights under the Service Extension Act of 1941. The Selective Service Act of 1948, as extended by the Extension Act of 1951, provides re-employment rights to men entering the armed forces for terms of three years or less, after June 24, 1948. These three laws grant to honorably discharged veterans:

1. Their old job back, or one of like seniority, status and pay.

2. Guarantee against discharge except for cause for one year after reinstatement. During that time the veteran cannot be demoted nor can his job benefits be reduced.

Qualifications on job rights

The veteran must be reapplying for a job that was not temporary at the time he left it; the employer need not reinstate him if circumstances have so changed as to make rehiring impossible or unreasonable; applications must be made within 90 days of discharge. Under the 1940 and 1941 laws the veteran need not be rehired if he is no longer qualified to do his job, but under

the 1948 law if he cannot do his former work he must be given a job as nearly like it as he can fill. A veteran may be laid off if work slackens.

How the veteran can enforce his rights

By suit in the U. S. District Court with the assistance of the U. S. Attorney.

National Guard, reserve officers, and retired personnel have Selective Service rights. Benefits are not limited to draft-ees—anyone, including WACS, WAVES, SPARS, and Marines (female), who entered active service after May 1, 1940, is covered.

Vocational rehabilitation

Vocational rehabilitation courses not exceeding 4 years and placement in suitable, gainful employment are available for any veteran who served on or after September 16, 1940, and on or before July 25, 1947, and was honorably discharged with a service-connected disability which can be overcome by training.

The Veterans Administration arranges for the training, pays for tuition and books and the veteran receives, in addition, training allowance added to his disability pension to achieve the following minimums for veterans with less than a 30% disability:

\$105 per month, if without a dependent

\$115 per month, if with a dependent, *plus*

(a) \$10 for one child and \$7 for each additional child, and

(b) \$15 for a dependent parent.

For veterans with a 30% or greater disability:

\$115 per month, if without a dependent

\$135 per month, if with a dependent plus \$20 for one child and \$15 for each additional child.

If the veteran's disability pension exceeds the above minimum he gets the larger amount. Once employed, his basic pension will in no way be reduced because he has overcome his handicap.

Disability Pensions

Veterans having a 10 per cent or more disability resulting from disease or injury incurred in or aggravated by war service are eligible to receive a pension if their separation from the service was not under dishonorable conditions. Pension rates vary from \$15.00 to \$150 per month, depending on the extent of disability. Pension payments are "untouchable" in legal proceedings and may not be assigned. Pension awards are within the jurisdiction of the Veterans Administration. A veteran's widow and surviving children are also eligible to receive pension benefits.

Veterans preference

Veterans who have been separated from the service under honorable conditions must be given preference in certification for appointment, in appointment, in rein-

statement, in re-employment and in retention in federal civil service positions. Specifically with respect to the positions of crier or bailiff in federal courts, the Court Crier or Bailiff Preference Act grants preference in appointment to veterans.

National Service Life Insurance

Persons in service and veterans who never owned any GI insurance, but who were in service between October 8, 1940 and September 2, 1945, are entitled to take out insurance in any amount between \$1,000 and \$10,000 in multiples of \$500. The insurance was originally issued only on a five-year level premium term plan, but veterans may now buy ordinary life, 20 or 30-payment life, 20-year endowment or endowment at age 60 or 65 as well as term insurance. Term policies taken out before 1946, may continue for 8 years and those taken out after that for 5. They may be converted at any time to any one of the 6 forms of permanent insurance.

Veterans have the right to convert the insurance without medical examination, except (a) where necessary to determine whether the insured is totally disabled and (b) upon complete surrender of the policy while it is still in force.

Men who have entered the service after Sept. 2, 1945, including men inducted under the Selective Service Act of 1948 or the Selective Service Extension Act of 1950, are also eligible for insurance if they take it out while in the service.

Servicemen's Readjustment Act of 1944

The "GI Bill of Rights" applies to veterans who served on or after September 16, 1940 or before July 25, 1947. It provides for hospitalization, education, loans, employment, and readjustment allowances.

Education

A veteran who has served 90 days or more since September 16, 1940 and before July 25, 1947 may avail himself of educational opportunities at government expense. He must start the course not later than 4 years after separation or 4 years after July 25, 1947, whichever is later. No education will be offered after July 25, 1956.

A veteran who qualifies is entitled to 12 months of education or its equivalent in part-time study plus additional time up to three years (a total of 4 years) in direct proportion to the time he spent in service.

The Veterans Administration will pay tuition and school fees up to a total of \$500 for each school year in attendance at an approved institution. No board, lodging, or other living or travel expenses are paid, but while at school the veteran is entitled to \$65 per month living allowance, and \$90 if he has dependents. Allowance will not be paid if the veteran is earning \$210 (if single), \$270 (if one dependent) or \$290 (if two or more dependents) in full- or part-time employment while he is attend-

ing school. Where the amount of his earnings is less than those ceilings, subsistence allowance payments will be made to bring the total up to the ceilings.

A veteran may also elect to take apprenticeship or on-the-job training in an industrial establishment. His earnings in training plus the government allowance cannot exceed \$210 a month if single, \$270 if married or \$290 if he has two or more dependents.

Loans to Veterans

Three types are available: 1. For purchase or construction of homes; 2. for purchase of farms and farm equipment; 3. for purchase of business and business property.

In all three types, eligibility requirements are that the veteran must have entered the armed service on or after September 16, 1940 and before July 25, 1947; he must have an honorable discharge after service of at least 90 days or a service-connected disability as reason for the discharge or release; application must be made by July 25, 1957.

The government will guarantee 50 per cent of the loan—up to a maximum guaranty of \$2,000 on non-real-estate loans, and \$4,000 on real-estate loans, or prorated portions on loans of both types or in combination. Proposed price must not exceed reasonable value as determined by an appraiser designated by the Administrator. Maximum interest rate is 4 per cent. Terms of loans: (a) on farm realty—40 years; (b) other real estate—30 years; (c) non-real estate—10 years.

The Housing Act of 1950 provided additional benefits in the case of home loans. A veteran whose property is taken by a government unit for public use, is destroyed by fire or other natural hazard, or is disposed of for other compelling reasons not the veteran's fault, may use his loan rights a second time. If the veteran has not previously used his loan benefit, 60% of the loan up to \$7,500 may be guaranteed. Or such a veteran may receive a direct government loan up to \$10,000 if private financing is not available. The total of these direct loans may not exceed \$150,000,000.

The unmarried widow of an eligible veteran who died in service or as a result of service-incurred disability is also eligible for all loan benefits.

Home Loans

Proceeds must be used for purchase of property, construction or improvement costs—the property to be occupied by the veteran as his home. Mortgage amortization terms must be in proper proportion to the veteran's present and expected income and expenses.

Business loans

Business loans will be approved when they are to be used (a) for engaging in business or pursuing a gainful occupation; (b) for purchasing land, buildings, supplies, equipment, machinery, etc., for business; (c) for constructing or repairing real or personal property to be used in business; (d) to provide working capital.

There must be reasonable likelihood of success, as indicated by the veteran's ability and experience and the conditions under which he intends to do the business.

Farm Loans

Farm loans will be made to a veteran for purchase or repair of lands, machinery, equipment, livestock, etc., for farming.

The ability and experience tests are similar to those applying to business loans.

Readjustment Allowance

Readjustment allowances are available only to veterans discharged from the service after July 25, 1947 and only for two years from the date of discharge. Eligibility of veterans discharged before July 25, 1947 expired on July 25, 1949. For eligible veterans, the law provides payment of \$20 a week for a maximum of 52 weeks. A partially employed veteran whose weekly wages are less than \$23 may receive \$20 less the amount of his wages in excess of \$3. A self-employed veteran earning less than \$100 per month is eligible for the difference between his net earnings and \$100.

Selective Service

Under the Selective Service Act of 1948 and the Selective Service Extension Act of 1950, men 18 to 26 must register for military service; men 19 to 26 are eligible for the draft. Veterans and men who were members of an organized reserve of the armed forces on June 24, 1948 are exempt from service. Ministers and divinity students, and the sole surviving son of a family which lost one or more children in the last war are also exempt. Deferred classifications include men with dependents, government officials, men mentally, morally or physically unfit, and certain aliens. High school students will be deferred until they become 20 or graduate whichever is earlier and college students doing satisfactory work will not be inducted before the end of the academic year. Men whose activity in study, research, medical or scientific work, agriculture or industry is found necessary to the national health, safety or interest may also be deferred. The President is empowered to name specific occupations which are necessary to the national health, safety or interest when he finds it advisable. Conscientious objectors are allowed to register for noncombatant service.

Classification of men is in the hands of local draft boards. Anyone may file a request for individual deferment with the

local board. Appeals of local board classifications may be taken to regional appeal boards and from them to the national appeal board.

On July 17, 1948, President Truman appointed Maj. Gen. Lewis B. Hershey as Director of Selective Service. Registration began on August 30, 1948 and the first draft call was in November. A total of 29,611 men were drafted before January 31, 1949 when the draft was suspended because armed forces quotas were being filled by voluntary enlistments. However, registration and classification of eligible men was continued by local draft boards. The draft began again with a call for 10,000 men on July 10, 1950. In September, Selective Service announced that it had been instructed to plan for induction of enough men to produce a 3-million-man Army by June 30, 1951, and maintain it thereafter.

The Dependents Assistance Act of 1950 provides payments to dependents of enlisted men, starting August 1, 1950, and ending April 30, 1953. Payments of \$45 to \$85 a month are made for up to 3 dependents, with servicemen contributing \$40 to \$80 a month depending on pay grade.

The Selective Service Extension Act of 1950 also gave the President authority to order members of the National Guard

or any reserve component of the armed forces to active duty. Mobilization of reserves began on July 20, 1950. Deferments are based on civilian occupation—reservist must be in a key managerial job or an occupation listed as critical by the Labor Department and in an industry named essential by the Department of Commerce. Enlisted reservists with 4 or more dependents will not be recalled without their consent and may be released if already in the service. All reservists of the Army, Navy, Air Force, and National Guardsmen, who were recalled involuntarily, will be released when training is adequate and replacements for them are secured from draftees or volunteers.

On September 9, 1950, a draft of doctors, dentists, veterinarians, osteopaths and optometrists began. Registration began October 16, 1950, for all doctors up to the age of 50, with induction up to the age of 51 for service of 21 months permitted. Only exemptions are for those in the reserves. President is to issue rules on deferments. Doctors who voluntarily join the reserves without waiting to be drafted receive a bonus of \$100 a month. First call is for 922 doctors, 500 dentists and 100 veterinarians by January, 1951. First to be drafted are doctors who received training at government expense but put in little or no active duty in the armed forces.

THE FEDERAL TAX SYSTEM

The Internal Revenue Code is the basic tax law of the Federal Government. Although it provides for many types of taxes such as gift, estate, manufacturers' excise, document, etc., its chief feature is the income tax, both individual and corporate.

Combined Normal Tax and Surtax

More than \$	Net income after deductions and exemptions of	But not over	Tax on lower amount	Per cent applicable to excess
0		2,000	0	20%
2,000		4,000	400	22%
4,000		6,000	840	26%
6,000		8,000	1,360	30%
8,000		10,000	1,960	34%
10,000		12,000	2,640	38%
12,000		14,000	3,400	43%
14,000		16,000	4,260	47%
16,000		18,000	5,200	50%
18,000		20,000	6,200	53%
20,000		22,000	7,260	56%
22,000		26,000	8,380	59%
26,000		32,000	10,740	62%
32,000		38,000	14,460	65%
38,000		44,000	18,360	69%
44,000		50,000	22,500	72%
50,000		60,000	26,820	76%
60,000		70,000	34,320	78%
70,000		80,000	42,120	81%
80,000		90,000	50,220	84%
90,000		100,000	58,620	87%
100,000		150,000	67,320	89%
150,000		200,000	111,820	90%
200,000			156,820	91%

(If the income includes any partially exempt interest, the tax is reduced by 3 per cent of that interest, or by 3 per cent of net income, if less than the interest.)

Individual Taxes

Individual tax rates for the calendar years 1950 and 1951 are: normal tax at 3 per cent, and surtax scaled from 17 per cent to 88 per cent. The combined normal tax and surtax are shown in the table above.

For 1950, the total of combined normal tax and surtax is a tentative tax and is reduced in accordance with the following to give actual tax due:

If the combined tentative tax is:	Reduce it by:
Not over \$400	13%
Over \$400 but not over \$100,000	\$52 plus 9% of the amount over \$400
Over \$100,000	\$9,016 plus 7.3% of amount over \$100,000

For example, if there is a combined tentative tax of \$1,960 on taxable income of \$8,000, the tentative tax amount falls into the second bracket of the percentage reduction table—over \$400 but not over \$100,000. The \$1,960 tentative tax will therefore be reduced by \$52 plus 9% of the amount over \$400. Nine per cent of \$1,560 (the amount over \$400) is \$140.40. The total reduction is therefore \$192.40 (\$52 plus \$140.40). Subtracting that amount from the \$1,960 tentative tax, the final actual tax is \$1767.60.

(No individual need pay a total tax greater than 80% of his net income.)

For 1951, an individual's tax is the combined normal tax and surtax computed under the above table without benefit of any reduction. The maximum total tax cannot exceed 87% of net income.

Husband-wife Income Splitting.

A husband and wife, regardless of whether they live in a community property or a non-community property state, are entitled to split their combined income for tax purposes by filing a joint return.

Where one spouse earns more than the other, the exercise of this privilege to split income will almost always result in a lower tax burden by subjecting the income to lower surtax rates.

The actual method of computing the "split-income" tax on a joint return is to arrive at the taxable net income and divide that in half. The tax is then calculated on half. The final tax due is double the amount of tax figured on one-half. Note that a husband and wife are entitled to split their income for tax purposes even though the wife has neither income nor deductions of her own.

To show how the split income computation is made, assume a married taxpayer has a net income in 1950 of \$12,000 after

deductions and exemptions. He files a joint return with his wife. In figuring the tax, he divides the \$12,000 income in half. He then computes the tax on \$6,000. This equals \$1,221.60. He then multiplies that amount by two to arrive at the final tax liability of \$2,443.20.

Deductions:

In computing taxable net income, the taxpayer has the choice of using either the actual deductions incurred by him, such as: interest, taxes, contributions, etc., or the optional standard deduction. The optional deduction is used in place of actual deductions and amounts to roughly 10 per cent of the taxpayer's income after business and employment expenses have been deducted. However, the maximum optional deduction is \$1,000 for single persons or married people filing joint returns and only \$500 for married persons filing separate returns.

Exemptions:

The same exemptions are allowed in calculating both the normal tax and the surtax. The taxpayer is entitled to a \$600 exemption for himself and each of his dependents. To claim someone as a dependent you must furnish over half the money spent for his support, his taxable income must be less than \$500, and he must be closely related to you. These are considered "close" relatives:

Son and daughter (including an adopted child), grandchild, great-grandchild, etc.

Stepchild

Son-in-law and daughter-in-law

Parents, grandparents, etc.

Stepfather and stepmother

Father-in-law and mother-in-law

Brother, sister, half-brother, half-sister

Brother-in-law and sister-in-law

Uncle, aunt, nephew and niece (but not if related to you only by marriage)

The taxpayer's wife is entitled to a \$600 exemption for normal tax and for surtax, whether on a separate or a joint return. But the husband may claim his wife's \$600 exemption on *his separate return* if she has no income and is not claimed as a dependent by another taxpayer.

Any taxpayer 65 years or older is entitled to a special \$600 exemption *in addition* to his regular \$600 personal exemption. An additional \$600 exemption is also available where a taxpayer's spouse reaches 65. To get this additional exemption, the taxpayer himself need not be 65. If both are 65 or over, there will be two additional exemptions of \$600 each, one for the husband and one for the spouse.

A blind taxpayer is entitled to a \$600 special exemption. This exemption for the blind is in addition to the \$600 personal exemption and the \$600 old age exemption.

A special \$600 exemption is also available for a spouse who is blind even though the taxpayer is not. This exemption also is in addition to the spouse's personal and old age exemptions.

The extra old age exemption and exemption for the blind are available only to a taxpayer and his spouse. There is no additional \$600 exemption for supporting a dependent who is 65 or over or blind.

How income tax is collected:

To keep the collection of individual taxes on a current basis, two devices are used:

(1) the withholding tax and (2) the declaration and payment of estimated tax. Withholding simply makes employers agents of the government in collecting taxes from employees. Through the use of withholding tables, the tax on an employee's salary is roughly calculated. A proportionate amount of the tax is then deducted from each payment of salary to the employee. If at the end of the year, it appears that too much has been withheld, the employee gets a tax refund; if not enough has been withheld, the employee sends in the difference with his tax return.

Since the wage withholding method doesn't place on a current basis taxpayers receiving dividends, interest, profits from business, etc., and wage earners whose tax will exceed the amount withheld on wages, these taxpayers file a declaration at the beginning of the year estimating their current year's taxes and pay it in quarterly installments. Just as in the case of withholding, any overpayment or underpayment of tax is adjusted in the return covering the entire year.

Who must file a return:

If you've earned \$600 or more during the year you must file a return. This is required whether you're single, married, divorced, widowed or under 21. Also, if you earned less than \$600 but received other income from interest, dividends, rents, pensions, etc., which brings your income up to \$600, a return is required.

What form to use:

FORM 1040 A. Lower bracket taxpayers whose earnings are primarily from salaries may file a simplified Form 1040 A. This eliminates the necessity of any tax computation by the taxpayer, since the collector computes the actual amount of tax liability. His calculation will be on the basis of the tax table which is part of Form 1040, and which automatically allows the standard deduction of approximately 10%. If any additional tax is due, the collector will send the taxpayer a bill for the amount. If the amount of taxes withheld from wages plus any amount paid as an estimated tax exceed the total tax due, a refund will be sent to the taxpayer.

FORM 1040. Every individual who does

not meet all the requirements of Form 1040 A, or who wants to make his own computations, must use Form 1040. If his adjusted gross income is less than \$5,000 and he is otherwise qualified, he may convert the form into a "short" form by tearing off pages 3 and 4, filing only pages 1 and 2. If he does so, he must use the taxable method of computing his tax liability.

Partnerships:

A partnership as such does not pay tax. Instead the individual partners pick up their share of the partnership net profit or loss and report it in their individual returns.

Estates and trusts:

Every fiduciary (except a receiver who is in possession of only part of an individual's property), or one of two or more joint fiduciaries must file a return for the following individuals, estates and trusts for which he acts:

(a) Every individual whose gross income for the taxable year is \$600 or more;

(b) Every estate which has a gross income of \$600 or more;

(c) Every trust which has a *net* income of \$100 or more, or which has a *gross* income of \$600 or more;

(d) Every estate or trust of which any beneficiary is a nonresident alien.

Corporation Taxes

Corporate tax rates for the calendar year 1950 are 23% normal tax on all income and 19% surtax on income over \$25,000. For calendar year 1951 the rates are 25% normal tax on all income and 20% surtax on income over \$25,000.

In addition, corporations which unreasonably accumulate earnings to avoid the surtax on individual stockholders are subject to a 27½%–38½% penalty surtax.

Gift Tax

Individuals who make gifts are subject to a gift tax based on the value of the property given. However, exemption is provided for a certain amount of gifts and the tax does not apply until the exemption is exceeded. The exemptions work this way:

During his lifetime, an individual may give away \$30,000 taxfree. In addition, the first \$3,000 of gifts made by him to each person in any one year is also exempt. For example, a taxpayer may give his wife and child \$3,000 apiece each year without incurring gift tax and without using up any of his \$30,000 lifetime exemption.

Gifts by husbands and wives:

Husbands and wives are entitled to certain special tax advantages regardless of whether the taxpayers live in a community property or a non-community property state.

After deducting exemptions, the value of gifts is taxed at the following rates:

(A) Amount of net gifts equaling—	(B) Amount of net gifts not exceeding—	(C) Tax on amount in column (A)	(D) Rate of tax on excess over amount in column (A) Per Cent
.....	\$ 5,000	.....	2¼
\$ 5,000	10,000	\$ 112.50	5¼
10,000	20,000	375.00	8¼
20,000	30,000	1,200.00	10½
30,000	40,000	2,250.00	13½
40,000	50,000	3,600.00	16½
50,000	60,000	5,250.00	18¾
60,000	100,000	7,125.00	21
100,000	250,000	15,525.00	22½
250,000	500,000	49,275.00	24
500,000	750,000	109,275.00	26¼
750,000	1,000,000	174,900.00	27¾
1,000,000	1,250,000	244,275.00	29¼
1,250,000	1,500,000	317,400.00	31½
1,500,000	2,000,000	396,150.00	33¾
2,000,000	2,500,000	564,900.00	36¾
2,500,000	3,000,000	748,650.00	39¾
3,000,000	3,500,000	947,400.00	42
3,500,000	4,000,000	1,157,400.00	44¼
4,000,000	5,000,000	1,378,650.00	47¼
5,000,000	6,000,000	1,851,150.00	50¼
6,000,000	7,000,000	2,353,650.00	52½
7,000,000	8,000,000	2,878,650.00	54¾
8,000,000	10,000,000	3,426,150.00	57
10,000,000	.....	4,566,150.00	57¾

A gift tax return (Form 708) and payment of the tax are due on March 15th following the close of the calendar year in which the taxable gifts are made.

1. *Gifts between husband and wife:* On every gift made from husband to wife, or vice versa, in a non-community property state, the donor will be entitled to a "marital" deduction equal to one-half the value of the gift. This, in effect, reduces the taxable value of the gift by one-half. Gifts of this type in community property states are treated the same way by virtue of the local community property law. In other words, since under the community property law the wife would be considered to own one-half of any community property given to her by her husband, the taxable value of the husband's gift would be only one-half the value of the community property transferred to the wife.

2. *Gifts by husband and wife to third persons:* A husband and wife in a non-community property state are entitled to "split" gifts made by either of them to some third person, if the other spouse consents to such splitting. The effect of this privilege is to treat a gift made by the husband, for example, as though made one-half by him and one-half by his wife. The resulting tax advantage is that the husband and wife have two full sets of gift tax exemptions and exclusions to apply against a gift which is really made by only one of them.

In community property states this consequence follows as a matter of local community property law, with both husband

and wife considered the equal donors of any community property given by either one of them to a third person.

Estate Tax

The estate tax is based on the net value of an individual's property which is transferred to others as a result of his death. The calculation of the actual estate tax due is somewhat complicated by the necessity of figuring two separate taxes.

The net tax payable is: (1) the estate tax, consisting of (a) the gross tax computed under Schedule I less (b) the credits allowable against such tax, plus (2) the additional estate tax, consisting of (a) the tentative tax computed under Schedule II less (b) the credits allowable against such tentative tax:

(1) *The estate tax* (1926 Act as amended—specific exemption of \$100,000 in determining net estate).

(a) Schedule I:

	Per cent
First \$50,000 of net estate	1
In excess of	
\$50,000 up to \$100,000	2
100,000 " " 200,000	3
200,000 " " 400,000	4
400,000 " " 600,000	5
600,000 " " 800,000	6
800,000 " " 1,000,000	7
1,000,000 " " 1,500,000	8

In excess of	Per cent
1,500,000 " " 2,000,000	9
2,000,000 " " 2,500,000	10
2,500,000 " " 3,000,000	11
3,000,000 " " 3,500,000	12
3,500,000 " " 4,000,000	13
4,000,000 " " 5,000,000	14
5,000,000 " " 6,000,000	15
6,000,000 " " 7,000,000	16
7,000,000 " " 8,000,000	17
8,000,000 " " 9,000,000	18
9,000,000 " " 10,000,000	19
10,000,000	20

(b) Credits:

(1) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not in excess of the proportion of the gross tax computed under the above schedule which the value of the gift property bears to the value of the gross estate.

(2) The entire amount of gift taxes paid under the Revenue Act of 1924 on gifts by the decedent which must be included in his gross estate.

(3) The amount of succession taxes paid to any state or territory in respect to property included in the gross estate, not exceeding 80 per cent of the tax computed under Schedule I before deducting credits Nos. 1 and 2.

(2) The additional estate tax (1932 Act as amended—specific exemption of \$60,000 in determining net estate).

(a) Schedule II:

First \$5,000	Per cent
.....	3

Net estate	Tax lower amount	Per cent on excess
\$5,000 to \$10,000	\$150	7
10,000 " 20,000	500	11
20,000 " 30,000	1,600	14
30,000 " 40,000	3,000	18
40,000 " 50,000	4,800	22
50,000 " 60,000	7,000	25
60,000 " 100,000	9,500	28
100,000 " 250,000	20,700	30
250,000 " 500,000	65,700	32
500,000 " 750,000	145,700	35
750,000 " 1,000,000	233,200	37
1,000,000 " 1,250,000	325,700	39
1,250,000 " 1,500,000	423,200	42
1,500,000 " 2,000,000	528,200	45
2,000,000 " 2,500,000	753,200	49
2,500,000 " 3,000,000	993,200	53
3,000,000 " 3,500,000	1,263,200	56
3,500,000 " 4,000,000	1,543,200	59
4,000,000 " 5,000,000	1,838,200	63
5,000,000 " 6,000,000	2,468,200	67
6,000,000 " 7,000,000	3,138,200	70
7,000,000 " 8,000,000	3,838,200	73
8,000,000 " 10,000,000	4,568,200	76
10,000,000 " and over	6,088,200	77

(b) Credits:

(1) The gross tax under Schedule I.

(2) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not credited against the estate tax under Schedule I and not in excess of the proportion of the tentative tax under Schedule II less the gross tax under Schedule I which the value of the gift property bears to the gross estate.

If the gross estate of decedent dying after October 21, 1942, exceeds \$60,000 (insurance included), the legal representative is required to file notice within 2 months after qualification and to file a return within 15 months after decedent's death. Tax is due within 15 months after decedent's death on Form 706. Tax is to be paid by the legal representative out of estate funds. Taxes unpaid after 15 months from the date of death draw interest at 6 per cent per annum, except that where an extension of time for payment is granted, the rate is 4 per cent for a period beginning 18 months after date of death until end of extension period.

Effective with respect to decedents dying on or after January 1, 1948, property left by a husband to his wife, or vice versa, will generally be treated the same for estate tax purposes whether the taxpayer dies in a community property or in a non-community property state.

In non-community property states this result is accomplished by means of a "marital" deduction. Upon the death of husband or wife, the entire value of whatever passes to the surviving spouse outright is deductible from the gross estate subject, however, to the following ceiling—the deduction may not exceed 50 per cent of the gross estate reduced by deductible claims and expenses.

In community property states the same result is obtained by giving effect to the local community property law which usually treats one-half of the community property as already belonging to the wife. Therefore, only one-half of the community property left by the husband to his wife is taxable in his estate.

Excise Taxes

Manufacturers' excise taxes based upon the amount of sales made by a manufacturer are levied at the following rates:

Automobile truck chassis and bodies	5%
Passenger automobile chassis and bodies, including motorcycles	7%
Parts and accessories	5%
Firearms, shells and cartridges	11%
Gasoline, per gallon	\$.015
Tires, per lb.	.05
Inner tubes, per lb.	.09
Lubricating oils, per gallon	.06
Matches:	
fancy wooden, per 1,000	.055
ordinary, per 1,000	.02

Excise Taxes—(Cont.)

Mechanical refrigerators and quick-freeze units	10%
Pistols and revolvers	11%
Television and radio receiving sets and parts	10%
Musical instruments, phonographs and records	10%
Sporting goods	10%
Electric, gas, and oil appliances	10%
Photographic apparatus	25%
Unexposed photographic films, plates and paper	15%
Business and store machines	10%
Electric light bulbs	20%
Retailers' excise taxes based on sales by retailers are levied as follows:	
Jewelry	20%
Furs	20%
Toilet preparations	20%
Luggage, etc.	20%
Watches with retail price of \$65 or less	10%
Alarm clocks with retail price of \$5 or less	10%
Stamp taxes on original issue and transfer of securities are as follows:	
Bonds:	
issue, per \$100 face value or fraction	.11
transfer, per \$100 face value or fraction	.05
Stocks:	
issue	
par value, per \$100 or fraction	.11
no par value, per \$20 of actual value or fraction where less than \$100 per share	.03
no par value, per \$100 of actual value or fraction where more than \$100 per share	.11
transfer	
par value, per \$100 aggregate face value or fraction:	
selling price less than \$20 a share	.05
selling price more than \$20 a share	.06
no par value, per share:	
selling price less than \$20 a share	.05
selling price more than \$20 a share	.06
Admissions and dues are taxed on the basis of the admissions and the dues paid:	
Admissions:	
per \$.05 or major fraction	\$.01
charges in excess of estab. price by other than ticket offices, on excess	20%
by proprietors and employees, on excess	50%
lease of boxes or seats, on equivalent box office price	20%
cabarets, roof gardens and similar entertainment	20%

Dues:

annual dues in excess of \$10	20%
initiation fees over \$10	20%
Telephone, telegraph, radio and cable facilities are taxed on the amount of charge for the services:	
Telephone conversations	
\$.25 and over	25%
A 15% tax is levied upon amount paid by subscribers for local telephone service and for toll charges of less than 25 cents.	
Telegraph messages	25%
Radio and cable messages	25%
Leased wire or special services	25%
Intern'l dispatches and messages	10%
Wire and equipment services	8%
Leases of safe deposit boxes are taxed on the basis of the amount paid for use of the box:	
On lease price	20%
Tobacco taxes are as follows:	
Cigars:	
weighing not over 3 lbs. per M	\$.75
weighing over 3 lbs. per M	
if retail price 2½¢ or less	2.50
if retail price over 2½¢ up to 4¢	3.00
if retail price over 4¢ up to 6¢	4.00
if retail price over 6¢ up to 8¢	7.00
if retail price over 8¢ up to 15¢	10.00
if retail price over 15¢ up to 20¢	15.00
if retail price over 20¢	20.00
Cigarettes:	
weighing not over 3 lbs. per M	3.50
weighing over 3 lbs. per M	8.40
Tobacco and snuff (per pound)	.18
Cigarette paper:	
package, book, or set of more than 25 and less than 50, per package	.005
package, book, or set of more than 50, not more than 100, per package	.01
package, book or set of more than 100 papers, per 50 papers	.005
in tubes, per 50 tubes or fraction	.01
Liquor taxes are as follows:	
Distilled spirits, per proof gallon	\$9.00
Imported perfumes containing distilled spirits	9.00
Rectified spirits, additional tax on each proof gallon	.30
Still wines:	
up to 14% alcohol per gallon	.15
over 14% up to 21% per gallon	.60
over 21% up to 24% per gallon	2.00
over 24% alcohol	9.00
Artificially carbonated wine, per half-pint	.10
Liqueurs, cordials and similar compounds, per half-pint	.10
Champagne and sparkling wine, per half-pint	.15
Fermented liquors, per barrel	8.00
Transportation taxes are levied on fares over 35 cents at the rate of 15 per cent.	

Individual and Corporate State Income Taxes

Individual (by % of income)		Corporate (by % of income)		Individual (by % of income)		Corporate (by % of income)	
ALABAMA				DISTRICT OF COLUMBIA			
First	\$1,000	1½	3	First	\$5,000	1½	5
Next	2,000	3		Next	5,000	2	
"	2,000	4½		"	5,000	2½	
Over	5,000	5		Over	15,000	3	
ARIZONA				GEORGIA			
First	\$2,000	1	First \$1,000 1	First	\$1,000	1	7% (or an alter-
Next	1,000	1¼	Next 1,000 2	Next	2,000	2	native tax based on
"	1,000	1½	" 1,000 2½	"	2,000	3	income plus com-
"	1,000	2	" 1,000 3	"	2,000	4	ensation, which-
"	1,000	2½	" 1,000 3½	"	3,000	5	ever is greater)
"	1,000	3	" 1,000 4½	"	10,000	6	
"	1,000	3½	Over 6,000 5	Over	20,000	7	
"	1,000	4					
Over	9,000	4½					
ARKANSAS				IDAHO			
First	\$3,000	1	Same as for indi-	First	\$1,000	1½	Same as for indi-
Next	3,000	2	viduals	Next	1,000	3	viduals
"	5,000	3		"	1,000	4	
Next	14,000	4		"	1,000	5	
Over	25,000	5		Over	5,000	8	
CALIFORNIA				INDIANA			
First	\$5,000	1	4	Generally	1¼ %	Same	
Next	5,000	2		with some lower			
"	5,000	3		rates (down to ½			
"	5,000	4		of 1%) applicable			
"	5,000	5		to gross income			
Over	25,000	6		from certain			
				sources.			
COLORADO				IOWA			
First	\$1,000	1	5	First	\$1,000	1	2
Next	1,000	1½		Next	1,000	2	
"	1,000	2		Next	1,000	3	
"	1,000	2½		"	1,000	4	
"	1,000	3		Over	4,000	5	
"	1,000	4		(25% reduction on			
"	1,000	5		the tax allowed for			
"	1,000	6		1949 and 1950.)			
"	1,000	7					
"	1,000	8					
"	1,000	9					
Over	11,000	10					
(For 1950, the tax computed at the above rates is reduced by 20%)				KANSAS			
CONNECTICUT				KENTUCKY			
None		3% (or an alterna-		First	\$3,000	2	4½
		tive tax based on		Next	1,000	3	
		capital, or \$15,		"	1,000	4	
		whichever is		"	3,000	5	
		greater)		Over	8,000	6	
DELAWARE				LOUISIANA			
First	\$3,000	1¼	None	First	\$10,000	2	4
Next	7,000	2¼		Next	40,000	4	
"	10,000	3¼		Over	50,000	6	
"	10,000	4¼					
"	20,000	5¼					
Over	50,000	6¼					
(Rates apply to gross income.)				MARYLAND			
				5% on investment income, 2% on other taxable net income.			

Individual (by % of income)	Corporate (by % of income)		Individual (by % of income)	Corporate (by % of income)	
MASSACHUSETTS			NEW YORK (cont.)		
1½ % to 6 % depending on nature of income. Total tax is increased by temporary surtax of 23 % of normal tax.	5½ % of net income plus .5 % of corporate "excess." Total tax is increased by temporary surtax of 23 % of normal tax.		(Capital gains taxed at one-half preceding rates) Tax on unincorporated business 4 %.		
MINNESOTA			Note: For the past seven years legislative action has cut the actual tax load without changing the basic rates. For 1949, individual tax was reduced by 10 % while unincorporated business tax rate was 3 %. Any reduction for 1950 would require further legislative action.		
First \$1,000	1	6	NORTH CAROLINA		
Next 1,000	2		First \$2,000	3	6
" 1,000	3		Next 2,000	4	
" 1,000	4		" 2,000	5	
" 1,000	5		" 4,000	6	
" 2,000	6		Over 10,000	7	
" 2,000	7		NORTH DAKOTA		
" 3,500	8		First \$2,000	1	First \$3,000 3
" 7,500	9		Next 2,000	2	Next 5,000 4
Over 20,000	10		" 1,000	3	" 7,000 5
(Increased by 5 % of tax. Additional annual tax of \$5 imposed on each person or corporation required to file return.)			" 1,000	5	Over 15,000 6
MISSISSIPPI			" 2,000	7½	
First \$4,000	1	Same as for individuals	" 2,000	10	
Next 3,000	2		" 5,000	12½	
" 3,000	3		Over 15,000	15	
" 5,000	4		OKLAHOMA		
" 10,000	5		First \$1,500	1	4
Over 25,000	6		Next 1,500	2	
MISSOURI			" 1,500	3	
First \$1,000	1	2	" 1,500	4	
Next 1,000	1½		" 1,500	5	
" 1,000	2		Over 7,500	6	
" 2,000	2½		OREGON		
" 2,000	3		First \$ 500	2	8
" 2,000	3½		Next 500	3	
Over 9,000	4		" 1,000	4	
MONTANA			" 1,000	5	
First \$2,000	1	3	" 1,000	6	
Next 2,000	2		" 4,000	7	
" 2,000	3		Over 8,000	8	
Over 6,000	4		PENNSYLVANIA		
NEW HAMPSHIRE			None 4		
Tax on income from intangible property at average rate of taxation levied upon other property.	None		RHODE ISLAND		
NEW MEXICO			None		
First \$10,000	1	2	4 % (or alternative tax based on corporate "excess," whichever is greater)		
Next 10,000	2		SOUTH CAROLINA		
" 80,000	3		First \$2,000	2	4½ % (or an alternative tax based on income plus salary, whichever is greater)
Over 100,000	4		Next 2,000	3	
NEW YORK			" 2,000	4	
First \$1,000	2		Over 6,000	5	
Next 2,000	3				
" 2,000	4				
" 2,000	5				
" 2,000	6				
Over 9,000	7				

Individual (by % of income)		Corporate (by % of income)		Individual (by % of income)		Corporate (by % of income)	
TENNESSEE				WISCONSIN			
6% on dividends and interest. 4% on dividends from corporations with 75% of their property taxable in Tennessee.		3.75		First \$1,000	1	First \$1,000	2
				Next 1,000	1 1/4	Next 1,000	2 1/2
				" 1,000	1 1/2	" 1,000	3
				" 1,000	2	" 1,000	3 1/2
				" 1,000	2 1/2	" 1,000	4
				" 1,000	3	" 1,000	5
				" 1,000	3 1/2	Over 6,000	6
				" 1,000	4		
				" 1,000	4 1/2		
				" 1,000	5		
				" 1,000	5 1/2		
				" 1,000	6		
				Over 12,000	7		
				Surtax computed by deducting \$37.50 from normal tax and dividing remainder by 6. A surtax equal to 25% of normal tax is imposed for 1950.		Surtax computed by deducting \$75 from normal tax and dividing by 6.	
UTAH							
First \$1,000	1	3% (or alternative tax based on tangible property in Utah, or \$10, whichever greater)					
Next 1,000	2						
" 1,000	3						
" 1,000	4						
Over 4,000	5						
VERMONT							
First \$1,000	1 1/2	4					
Next 2,000	3						
" 2,000	4 1/2						
Over 5,000	5 1/2						
VIRGINIA							
First \$3,000	2	5					
Next 2,000	3						
Over 5,000	5						

Famous Ship Canals of the World

Source: Encyclopaedia Britannica.

Name	Location	Year opened	Length (miles)	Width (feet)	Depth (feet)	Number of locks
Albert.....	Belgium	1939	80.0	53.0	16.5	6
Amsterdam-North Sea.....	Netherlands	1876	13.0	164.0	41.0	4
Beaumont-Port Arthur.....	United States	1916	40.0	200.0	34.0	...
Bruges-Zeebrugge.....	Belgium	1907	6.3	65.7	18.1	1
Brussels-Rupel.....	Belgium	1922	18.5	52.5	21.0	4
Cape Cod.....	United States	1914	17.5	450.0	28.9	...
Chesapeake and Delaware.....	United States	1927	19.0	250.0	27.0	...
Chicago Sanitary and Ship.....	United States	1900	30.0	110.0	22.0	1
Corinth.....	Greece	1893	4.0	69.0	26.3	...
Falsterbo.....	Sweden	1942	1.0	82.0	24.0	2
Ghent-Terneuzen.....	Belgium	1927	17.0	80.0	28.0	6
Göta*.....	Sweden	1832	47.0	23.6	9.7	58
Houston*.....	United States	1914	50.0	200.0	33.0	...
Kiel.....	Germany	1895	53.3	144.0	37.0	4
Lake Washington.....	United States	1916	8.0	80.0	30.0	2
Manchester.....	England	1894	46.5	65.0	28.0	10
Moscow-Volga.....	U.S.S.R.	1937	80.0	98.4	18.0	11
Panama.....	Canal Zone	1914	50.0	110.0	41.0	12
Sault Ste. Marie.....	Canada	1895	1.2	60.0	16.8	1
Sault Ste. Marie.....	United States	1915	1.6	80.0	25.0	4
Suez.....	Egypt	1869	87.5	197.0	34.0	...
Trollhätte*.....	Sweden	1916	54.0	45.0	14.4	6
Welland.....	Canada	1931	27.6	80.0	25.0	8

* Reconstructed.

★ WHO'S WHO ★

LEADERS IN THE ARTS, PUBLIC AFFAIRS, AND SCIENCES LEADING ASSOCIATIONS AND SOCIETIES

Prepared by

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Locations and dates are those of birth. A name in parentheses is the original name or form of the name of the individual.

The vital statistics offered in this section have been gathered from various sources, including the subjects thereof, but neither *Who's Who in America* nor the *Information Please Almanac* can guarantee the accuracy of each individual item. We have learned to accept the date and place of birth that any lady or gentleman claims for herself or himself and not argue about it. Where we have not been able to learn the date and place of birth, we have not attempted to invent the items.

JOHN KIERAN, Editor

Art

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| ALBRIGHT, Ivan Le Lorraine (painter); Chicago, Ill., Feb. 20, 1897. | COVARRUBIAS, Miguel (illustrator); Mexico City, Mex., 1902. |
| ALBRIGHT, Malvin (painter, sculptor); Chicago, Ill., Feb. 20, 1897. | DALI, Salvador (painter); Figueras, Sp., May 11, 1904. |
| ARCHIPENKO, Alexander (sculptor); Kiev, Rus., May 30, 1887. | DAVIDSON, Jo (sculptor); New York City, Mar. 30, 1883. |
| BENTON, Thomas Hart (painter); Neosho, Mo., Apr. 15, 1889. | DAVIS, Stuart (painter); Philadelphia, Pa., Dec. 7, 1894. |
| BLUME, Peter (painter); Russia, Oct. 27, 1906. | DERAIN, André (painter); Chatou, Fr., June 10, 1880. |
| BRANCUSI, Constantin (sculptor); Rumania, 1878. | DUFY, Raoul (painter); 1878. |
| BRANGWYN, Sir Frank (painter); Bruges, Belg., May 13, 1867. | EPSTEIN, Jacob (sculptor); New York City, Nov. 10, 1880. |
| BRAQUE, Georges (painter); Argenteuil, Fr., May 13, 1882. | FEININGER, Lyonel (painter); New York City, July 17, 1871. |
| BROOK, Alexander (painter); Brooklyn, N. Y., July 14, 1898. | GROPIUS, Walter (architect); Berlin, Ger., May 18, 1883. |
| BURCHFIELD, Charles E. (watercolorist); Ashtabula, Ohio, Apr. 9, 1893. | GROPPER, William (painter); New York City, Dec. 3, 1897. |
| CADMUS, Paul (painter, etcher); New York City, Dec. 17, 1904. | GROSZ, George (painter); Berlin, Ger., July 26, 1893. |
| CALDER, Alexander ("mobile" sculptor); Lawnton, Pa., July 22, 1898. | HASELTINE, Herbert (sculptor); Rome, It., Apr. 10, 1877. |
| CARROLL, John (painter); Wichita, Kans., Aug. 14, 1892. | HOPPER, Edward (painter); Nyack, N. Y., July 22, 1882. |
| CHAGALL, Marc (painter); Vitebsk, Rus., July 7, 1887. | JONES, Robert Edmond (stage designer); Milton, N. H., Dec. 12, 1887. |
| CHIRICO, Giorgio de (painter); Volo, Gr., July 10, 1888. | KANTOR, Morris (painter); Russia, Apr. 15, 1896. |
| CORBINO, Jon (painter); Vittoria, It., Apr. 3, 1905. | KARFIOL, Bernard (painter); Budapest, Hung., May 6, 1886. |
| | KENT, Rockwell (painter); Tarrytown Heights, N. Y., June 21, 1882. |

(For Who's Who in Sports, see Index.)

- KOKOSCHKA, Oskar (painter); Pöchlarn, Aus., Mar. 1, 1886.
- KROLL, Leon (painter); New York City, Dec. 6, 1884.
- KUNIYOSHI, Yasuo (painter); Okayama, Jap., Sept. 1, 1893.
- LATHROP, Gertrude Katherine (sculptor); Albany, N. Y., Dec. 24, 1896.
- LE CORBUSIER (Charles-Édouard Jeanneret) (architect); La Chaux De Fonds, Switz., Oct. 6, 1887.
- LÉGER, Fernand (painter); near Liseaux, Fr., Feb., 1881.
- LIPCHITZ, Jacques (sculptor); Druskielniki, Lith., Aug. 22, 1891.
- MARIN, John (watercolorist); Rutherford, N. J., Dec. 23, 1872.
- MARSH, Reginald (painter, etcher); Paris, Fr., Mar. 14, 1898.
- MATISSE, Henri (painter); Cateau, Fr., Dec. 31, 1869.
- MATTA (Matta Echaurren) (painter); Chile, 1912.
- MATTSON, Henry (painter); Gothenburg, Swed., Aug. 7, 1887.
- MESTROVIĆ, Ivan (sculptor); Vrpolje, Yugos., Aug. 15, 1883.
- MIELZINER, Jo (stage designer); Paris, Fr., Mar. 19, 1901.
- MILLES, Carl (sculptor); Uppsala, Swed., June 23, 1875.
- MIRÓ, Joan (painter); Barcelona, Sp., Apr. 21, 1893.
- MOORE, Bruce (sculptor); Bern, Kans., Aug. 5, 1905.
- MOORE, Henry (sculptor); Castleford, Eng., July 30, 1898.
- MOSES, Grandma (Anna Mary) (painter); Greenwich, N. Y., Sept. 7, 1860.
- NAGLER, Fred (painter); Springfield, Mass., Feb. 27, 1891.
- NOGUCHI, Isamu (sculptor); Los Angeles, Calif., Nov. 7, 1904.
- O'KEEFE, Georgia (painter); Sun Prairie, Wis., Nov. 15, 1887.
- PEIRCE, Waldo (painter); Bangor, Maine, Dec. 17, 1884.
- PICASSO, Pablo (painter, sculptor); Málaga, Sp., Oct. 25, 1881.
- PORTINARI, Candido (painter); Brazil, 1903.
- QUINTANILLA, Luis (painter); Santander, Sp., June 13, 1895.
- RATTNER, Abraham (painter); Poughkeepsie, N. Y., July 8, 1895.
- RIVERA, Diego (painter); Guanajuato, Mex., Dec. 8, 1886.
- ROBINSON, Boardman (painter); Somerset, Nova Scotia, Sept. 6, 1876.
- ROUAULT, Georges (painter, lithographer); Paris, Fr., May 27, 1871.
- SAMPLE, Paul (painter); Louisville, Ky., Sept. 14, 1896.
- SEGONZAC, André Dunoyer de (painter); France, 1885.
- SEPESHY, Zoltan (painter); Kassa, Hung., Nov. 24, 1898.
- SHEELER, Charles (painter); Philadelphia, Pa., July 16, 1883.
- SIMONSON, Lee (stage designer); New York City, June 26, 1888.
- SIQUEIROS, David (painter); Mexico, 1894.
- SLOAN, John (painter); Lock Haven, Pa., Aug. 2, 1871.
- SPEICHER, Eugene (painter); Buffalo, N. Y., Apr. 5, 1883.
- STERNE, Maurice (painter, sculptor); Libau, Rus., July 13, 1878.
- TANGUY, Yves (painter); France, 1900.
- TCHELITCHEW, Pavel (painter); near Moscow, Rus., Sept. 21, 1898.
- UTRILLO, Maurice (painter); Paris, Fr., Dec. 25, 1883.
- VLAMINCK, Maurice de (painter); Paris, Fr., Apr. 4, 1876.
- WALKER, Ralph Thomas (architect); Waterbury, Conn., Nov. 28, 1889.
- WEBER, Max (painter); Bialystok, Rus., Apr. 18, 1881.
- WRIGHT, Frank Lloyd (architect); Richland Center, Wis., June 8, 1869.
- ZORACH, William (sculptor); Eurburg, Lith., Feb., 28, 1887.

Concert Music

- ALBANESE, Licia (soprano); Bari, It., July 22, 1913.
- ALDA, Frances (soprano); Christchurch, N. Z., May 31, 1885.
- ANDERSON, Marian (contralto); Philadelphia, Pa., Feb. 17, 1902.
- ANTHEIL, George (composer); Trenton, N. J., July 8, 1890.
- ARRAU, Claudio (pianist); Chillan, Chile, Feb. 6, 1904.
- BACCALONI, Salvatore (basso); Rome, It., Apr. 14, 1900.
- BAMPTON, Rose (contralto); Cleveland, Ohio, Nov. 28, 1909.
- BARBER, Samuel (composer); West Chester, Pa., Mar. 9, 1910.
- BARBIROLLI, Sir John (conductor); London, Eng., Dec. 2, 1899.
- BARER, Simon (pianist); Odessa, Rus., 1896.
- BARLOW, Howard (conductor); Plain City, Ohio, May 1, 1892.
- BAUER, Harold (pianist); New Malden, Mass., Apr. 28, 1873.

- BAX, Sir Arnold (composer); London, Eng., Nov. 8, 1883.
- BEECHAM, Sir Thomas (conductor); St. Helena, Eng., Apr. 29, 1879.
- BENNETT, Robert Russell (composer); Kansas City, Mo., June 15, 1894.
- BERNSTEIN, Leonard (composer, conductor); Lawrence, Mass., Aug. 25, 1918.
- BING, Rudolf (gen. mgr., Met. Opera Co.); Vienna, Aus., Jan. 9, 1902.
- BJOERLING, Jussi (tenor); Stora Tuna Dalarna, Swed., Feb. 2, 1911.
- BLITZSTEIN, Marc (composer); Philadelphia, Pa., Mar. 2, 1905.
- BLACK, Frank (conductor); Philadelphia, Pa., Nov. 28, 1894.
- BLOCH, Ernest (composer); Geneva, Switz., July 24, 1880.
- BONELLI, Richard (Richard Bunn) (baritone); Port Byron, N. Y.
- BORI, Lucrezia (soprano); Valencia, Sp., Dec. 24, 1887.
- BOULT, Sir Adrian (conductor); Chester, Eng., Apr. 8, 1889.
- BRAIOWSKY, Alexander (pianist); Kiev, Rus., Feb. 16, 1896.
- BRANZELL, Karin (contralto); Stockholm, Swed., Sept. 24, 1891.
- BRICE, Carol (contralto), Indianapolis, Ind., Apr. 16, 1918.
- BRITTEN, Benjamin (composer); Lowestoft, Eng., Nov. 22, 1913.
- BROWNLEE, John (baritone); Geelong, Austr., Jan. 7, 1901.
- BUSCH, Adolf (composer, violinist); Siegen, Westphalia, Aug. 8, 1891.
- BUSCH, Fritz (conductor); Siegen, Westphalia, Mar. 13, 1890.
- CARPENTER, John Alden (composer); Park Ridge, Ill., Feb. 28, 1876.
- CASADESUS, Robert (pianist); Paris, Fr., Apr. 7, 1899.
- CASALS, Pablo (cellist); Vendrell, Sp., Dec. 29, 1876.
- CASELLA, Alfredo (composer, pianist); Turin, It., July 25, 1883.
- CASTAGNA, Bruna (contralto); Milan, It., Oct. 15, 1908.
- CASTELNUOVO-TEDESCO, Mario (composer); Florence, It., Apr. 3, 1895.
- CHARPENTIER, Gustave (composer); Dieuze, Fr., June 25, 1860.
- CHAVEZ, Carlos (composer); near Mexico City, Mex., June 13, 1899.
- COATES, Albert (conductor); St. Petersburg, Rus., Apr. 23, 1882.
- COATES, Eric (composer); Hucknall, Eng., Aug. 27, 1886.
- COPLAND, Aaron (composer); Brooklyn, N. Y., Nov. 14, 1900.
- CORTOT, Alfred (pianist); Nyon, Fr., Sept. 26, 1877.
- CROOKS, Richard (tenor); Trenton, N. J., June 26, 1900.
- CURZON, Clifford (pianist); London, Eng., May 18, 1907.
- DAMBROSCH, Walter (conductor); Breslau, Prus., Jan. 30, 1862.
- DEFAUW, Désiré (conductor); Ghent, Belg., Sept. 5, 1885.
- DIAMOND, David (composer); Rochester, N. Y., July 9, 1915.
- DOHNÁNYI, Ernst von (composer, pianist); Pressburg, Slovakia, July 27, 1877.
- DORATI, Antal (conductor); Budapest, Hung., Apr. 9, 1906.
- EAMES, Emma (soprano); Shanghai, China, Aug. 13, 1865.
- ELMAN, Mischa (violinist); Stalnoje, Rus., Jan. 20, 1891.
- ENESCO, Georges (composer, violinist); Dorohol, Rum., Aug. 19, 1881.
- FARRAR, Geraldine (soprano); Melrose, Mass., Feb. 28, 1882.
- FIEDLER, Arthur (conductor); Boston, Mass., Dec. 17, 1894.
- FIRKUSNY, Rudolf (pianist); Napajedda, Czech., Feb. 11, 1912.
- FISCHER, Edwin (pianist); Basel, Switz., Oct. 6, 1886.
- FLAGSTAD, Kirsten (soprano); Hamar, Nor., July 12, 1895.
- FOSS, Lukas (composer); Berlin, Ger., Aug. 15, 1922.
- FRANCAIX, Jean (composer); Le Mans, Fr., May 23, 1912.
- FRANCESCATTI, Zino (violinist); Marseille, Fr., Aug. 9, 1905.
- FURTWÄGLER, Wilhelm (conductor); Berlin, Ger., Jan. 25, 1886.
- GALLI-CURCI, Amelita (soprano); Milan, It., Nov. 18, 1889.
- GANZ, Rudolph (conductor, pianist); Zürich, Switz., Feb. 24, 1877.
- GARBOUSOVA, Raya (cellist); Tiflis, Rus., Sept. 25, 1909.
- GARDEN, Mary (soprano); Aberdeen, Scot., Feb. 20, 1877.
- GIANNINI, Dusolina (soprano); Philadelphia, Pa., Dec. 19, 1904.
- GIESEKING, Walter (pianist); Lyon, Fr., Nov. 5, 1895.
- GIGLI, Beniamino (tenor); Recanati, It., Mar. 20, 1890.
- GLIÈRE, Reinhold (composer); Kiev, Rus., Jan. 11, 1875.
- GOLDMAN, Edwin F. (composer, conductor); Louisville, Ky., Jan. 1, 1878.
- GOLDSCHMANN, Vladimir (conductor); Paris, Fr., Dec. 16, 1893.

- GOOSSENS, Eugene (conductor); London, Eng., May 26, 1893.
- GOOSSENS, Leon (obolst); London, Eng., 1896.
- GORIN, Igor (baritone); Ukraine, Rus., Oct. 26, 1909.
- GRAINGER, Percy (pianist); Melbourne, Austr., July 8, 1882.
- GRETCHANINOV, Alexander (composer); Moscow, Rus., Oct. 25, 1864.
- GROFE, Ferde (composer); New York City, Mar. 27, 1892.
- GRUENBERG, Louis (composer); Russia, Aug. 3, 1884.
- HANSON, Howard (composer, conductor); Wahoo, Nebr., Oct. 28, 1896.
- HARRIS, Roy (composer); Lincoln Co., Okla., Feb. 12, 1898.
- HARRISON, Guy Fraser (conductor); Guildford, Eng., Nov. 6, 1894.
- HAYES, Roland (tenor); Curryville, Ga., June 3, 1887.
- HEIFETZ, Jascha (violinist); Vilna, Rus., Feb. 2, 1901.
- HENDL, Walter (conductor); West New York, N. J., Jan. 12, 1917.
- HESS, Myra (pianist); London, Eng., Feb. 25, 1890.
- HINDEMITH, Paul (composer); Hanau, Ger., Nov. 16, 1895.
- HOFMANN, Josef (pianist); Cracow, Pol., Jan. 20, 1876.
- HONEGGER, Arthur (composer); Le Havre, Fr., Mar. 10, 1892.
- HOROWITZ, Vladimir (pianist); Kiev, Rus., Oct. 1, 1904.
- IBERT, Jacques (composer); Paris, Fr., Aug. 15, 1890.
- ITURBI, José (pianist, conductor); Valencia, Sp., Nov. 28, 1895.
- IVES, Charles (composer); Danbury, Conn., Oct. 20, 1874.
- JAGEL, Frederick (tenor); Brooklyn, N. Y., June 10, 1897.
- JANSSEN, Herbert (baritone); Cologne, Ger.
- JANSSEN, Werner (conductor); New York City, June 1, 1900.
- JEPSON, Helen (soprano); Titusville, Pa., Nov. 25, 1907.
- JERITZA, Maria (soprano); Brunn, Aus., Oct. 6, 1887.
- JOHNSON, Hall (choral director); Athens, Ga., Mar. 12, 1888.
- KABALEVSKY, Dmitri (composer); St. Petersburg, Rus., Dec. 30, 1904.
- KAPELL, William (pianist); New York City, Sept. 20, 1922.
- KATIMS, Milton (violinist); Brooklyn, N. Y., June 24, 1909.
- KHACHATURIAN, Aram (composer); Tiflis, June 6, 1903.
- KIEPURA, Jan (tenor); Sosnowiec, Pol., May 16, 1902.
- KIPNIS, Alexander (basso); Ukraine, Feb. 1, 1896.
- KIRKPATRICK, Ralph (harpsichordist); Leominster, Mass., June 10, 1911.
- KIRSTEN, Dorothy (soprano); Montclair, N. J., July 6, 1919.
- KLEIBER, Erich (conductor); Vienna, Aus., Aug. 5, 1890.
- KODÁLY, Zoltán (composer); Kecskemét, Hung., Dec. 16, 1882.
- KORJUS, Miliza (soprano); Warsaw, Pol., Aug. 18, 1909.
- KORNGOLD, Erich (composer); Brunn, Aus., May 29, 1897.
- KOSTELANETZ, Andre (conductor); St. Petersburg, Rus., Dec. 22, 1901.
- KOUSSEVITZKY, Serge (conductor); Tver, Rus., July 26, 1874.
- KREISLER, Fritz (violinist); Vienna, Aus., Feb. 2, 1875.
- KŘEENEK, Ernst (composer); Vienna, Aus., Aug. 23, 1900.
- KRUEGER, Karl (conductor); Atchison, Kans., Jan. 19, 1894.
- KULLMAN, Charles (tenor); New Haven, Conn., Jan. 13, 1903.
- KURENKO, Maria (soprano); Moscow, Rus., 1899.
- KURTZ, Efrem (conductor); St. Petersburg, Rus., Nov. 7, 1900.
- LAMBERT, Constant (conductor); London, Eng., Aug. 23, 1905.
- LANDOWSKA, Wanda (harpsichordist); Warsaw, Pol., July 5, 1877.
- LANGE, Hans (conductor); Constantinople, Turk., Feb. 17, 1884.
- LAURI-VOLPI, Giacomo (tenor); Rome, It., Dec. 11, 1894.
- LAWRENCE, Marjorie (soprano); Deans Marsh, Austr., Feb. 17, 1909.
- LEHMANN, Lotte (soprano); Perleberg, Ger., July 2, 1885.
- LEINSDORF, Erich (conductor); Vienna, Aus., Feb. 4, 1912.
- LEV, Ray (pianist); Rostov on Don, Rus., May 8, 1912.
- LEVANT, Oscar (pianist); Pittsburgh, Pa., Dec. 27, 1906.
- LIST, Emanuel (basso); Vienna, Aus., Mar. 22, 1891.
- LIST, Eugene (pianist); Calif., 1921.
- MCDONALD, Harl (composer); near Boulder, Colo., July 27, 1899.
- MACMILLAN, Sir Ernest (conductor); Mimico, Can., Aug. 18, 1893.
- MARTINELLI, Giovanni (tenor); Montagnana, It., Oct. 22, 1885.

- MARTINU, Bohuslav (composer); Policka, Czech., Dec. 8, 1890.
- MASON, Daniel Gregory (composer); Brookline, Mass., Nov. 20, 1873.
- MATZENAUEER, Margaret (contralto); Temesvar, Hung., June 1, 1881.
- MAYNOR, Dorothy (soprano); Norfolk, Va., Sept. 3, 1910.
- MEDTNER, Nicolas (composer); Moscow, Rus., Jan. 5, 1880.
- MELCHIOR, Lauritz (tenor); Copenhagen, Den., Mar. 20, 1890.
- MELTON, James (tenor); Moultrie, Ga., Jan. 2, 1904.
- MENGELBERG, Willem (conductor); Utrecht, Neth., Mar. 28, 1871.
- MENOTTI, Gian-Carlo (composer); Cadegliano, It., July 7, 1911.
- MENUHIN, Yehudi (violinist); New York City, Apr. 22, 1916.
- MERRILL, Robert (baritone); Brooklyn, N. Y., June 4, 1919.
- MERRIMAN, Nan (mezzo-soprano); Pittsburgh, Pa., Apr. 28, 1920.
- MILANOV, Zinka (soprano); Zagreb, Yugos., May 17, 1908.
- MILHAUD, Darius (composer); Aix-en-Provence, Fr., Sept. 4, 1892.
- MILSTEIN, Nathan (violinist); Odessa, Rus., Dec. 31, 1904.
- MITROPOULOS, Dimitri (conductor); Athens, Gr., Feb. 18, 1896.
- MOISEVITCH, Benno (pianist); Odessa, Rus., Feb. 22, 1890.
- MONTEMEZZI, Italo (composer); Vigasio, It., Aug. 4, 1875.
- MONTEUX, Pierre (conductor); Paris, Fr., Apr. 4, 1875.
- MORINI, Erica (violinist); Vienna, Aus., Jan. 5, 1910.
- MUENCH, Charles (conductor); Strasbourg, Ger., Sept., 1891.
- MUNSEL, Patrice (soprano); Spokane, Wash., May 14, 1925.
- NOVAËS, Guiomar (pianist); São João da Boa Vista, Braz., Feb. 28, 1895.
- NOVOTNA, Jarmila (soprano); Prague, Czech., Sept. 23, 1911.
- ORMANDY, Eugene (conductor); Budapest, Hung., Nov. 18, 1899.
- PEERCE, Jan (Jacob Pincus Perelmuth) (tenor); New York City, 1904.
- PELLETIER, Wilfred (conductor); Montreal, Can., June 30, 1896.
- PERSINGER, Louis (violinist); Rochester, Ill., Feb. 11, 1887.
- PESSL, Yella (harpsichordist); Vienna.
- PETRI, Egon (pianist); Hanover, Ger., Mar. 23, 1881.
- PHILIPP, Isidore (pianist); Budapest, Hung., Sept. 2, 1863.
- PIATIGORSKY, Gregor (cellist); Ekaterinoslav, Rus., Apr. 17, 1903.
- PINZA, Ezio (basso); Rome, It., May 18, 1892.
- PISTON, Walter (composer); Rockland, Maine, Jan. 20, 1894.
- PONS, Lily (soprano); Cannes, Fr., Apr. 13, 1904.
- PONSELLE, Rosa (soprano); Meriden, Conn., Jan. 22, 1897.
- POULENC, Francis (composer); Paris, Fr., Jan. 7, 1899.
- PRIMROSE, William (violinist); Glasgow, Scot., Aug. 23, 1904.
- PROKOFIEFF, Serge (composer); Sontsovka, Rus., Apr. 23, 1891.
- RAISA, Rosa (soprano); Bialystok, Pol., May 30, 1893.
- RALF, Torsten (tenor); Sweden, 1915.
- REINER, Fritz (conductor); Budapest, Hung., Dec. 19, 1888.
- RETHBERG, Elisabeth (soprano); Schwarzenberg, Ger., Dec. 22, 1894.
- ROBESON, Paul (baritone); Princeton, N. J., Apr. 9, 1898.
- RODZINSKI, Artur (conductor); Spalato, Dalmatia, Jan. 2, 1892.
- RUBINSTEIN, Artur (pianist); Warsaw, Pol., Jan. 28, 1889.
- SAIDENBERG, Daniel (conductor); Winnipeg, Can., Oct. 12, 1906.
- SALMOND, Felix (cellist); London, Eng., Nov. 19, 1888.
- SALZEDO, Carlos (harpist); Arachon, Fr., Apr. 6, 1885.
- SÁNDOR, György (pianist); Budapest, Hung., Sept. 21, 1912.
- SANROMÁ, Jesús María (pianist); Carolina, P. R., Nov., 7, 1902.
- SARGENT, Sir Malcolm (conductor); Stamford, Eng., Apr. 29, 1895.
- SAYÃO, Bidú (soprano); Rio de Janeiro, Braz., May 11, 1906.
- SCHIÖTZ, Aksel (tenor); Roskilde, Den., Sept. 1, 1906.
- SCHIPA, Tito (tenor); Lecce, It., Jan. 2, 1890.
- SCHNABEL, Artur (pianist); Lipnik, Aus., Apr. 17, 1882.
- SCHNEIDER, Alexander (violinist); Vilna, Pol., Dec. 21, 1908.
- SCHÖNBERG, Arnold (composer); Vienna, Aus., Sept. 13, 1874.
- SCHORR, Friedrich (baritone); Nagyvárad, Hung., Sept. 2, 1888.
- SCHUMAN, William (composer); New York City, Aug. 4, 1910.
- SCHUMANN, Elisabeth (soprano); Merseburg, Ger., June 13, 1891.
- SCOTT, Cyril (composer); Oxton, Eng., Sept. 27, 1879.

- SEGOVIA, Andrés (guitarist); Linares, Sp., Feb. 18, 1894.
- SEIDEL, Toscha (violinist); Odessa, Rus., Nov. 17, 1899.
- SERKIN, Rudolf (pianist); Eger, Boh., Mar. 28, 1903.
- SESSIONS, Roger (composer); Brooklyn, N. Y., Dec. 28, 1896.
- SEVITZKY, Fabien (Fabien Koussevitzky) (conductor); Vyshni-Volochek, Rus., Sept. 30, 1893.
- SHAW, Robert (choral dir.); Red Bluff, Calif., Apr. 30, 1916.
- SHOSTAKOVICH, Dmitri (composer); St. Petersburg, Rus., Sept. 26, 1906.
- SIBELIUS, Jean (composer); Tavastehus, Fin., Dec. 8, 1866.
- SINGER, Martial (baritone); Oloron-Ste-Marie, Fr., Aug. 14, 1904.
- SMALLENS, Alexander (conductor); St. Petersburg, Rus., Jan. 1, 1889.
- SOWERBY, Leo (composer); Grand Rapids, Mich., May 1, 1895.
- SPALDING, Albert (violinist); Chicago, Ill., Aug. 15, 1888.
- STEBER, Eleanor (soprano); Wheeling, W. Va., July 17, 1916.
- STEINBERG, William (conductor); Cologne, Ger., Aug. 1, 1899.
- STERN, Isaac (violinist); Kremniesy, Rus., July 21, 1920.
- STEVENS, Risë (mezzo-soprano); New York City, June 11, 1913.
- STEWART, Reginald (conductor); Edinburgh, Scot., Apr., 20, 1900.
- STIEDRY, Fritz (conductor); Vienna, Aus., Oct. 11, 1883.
- STIGNANI, Ebe (mezzo-soprano); Naples, It., July 10, 1907.
- STILL, William Grant (composer); Woodville, Miss., May 11, 1895.
- STOKOWSKI, Leopold (conductor); London, Eng., Apr. 18, 1882.
- STRAUS, Oskar (composer); Vienna, Aus., Apr. 6, 1870.
- STRAVINSKY, Igor (composer); Oranienbaum, Rus., June 17, 1882.
- SVANHOLM, Set (tenor); Vasteras, Swed., Sept. 2, 1904.
- SWARTHOUT, Gladys (mezzo-soprano); Deepwater, Mo., Dec. 25, 1904.
- SZELL, George (conductor); Budapest, Hung., June 7, 1897.
- SZIGETI, Joseph (violinist); Budapest, Hung., Sept. 5, 1892.
- TAGLIAVINI, Ferruccio (tenor); Reggio Emilia, It., Aug. 14, 1913.
- TAJO, Italo (basso); Pinerolo, It., Apr. 25, 1915.
- TAYLOR, Deems (composer); New York City, Dec. 22, 1885.
- TEMPLETON, Alec (pianist); Cardiff, Wales, July 4, 1910.
- TEYTE, Maggie (soprano); Wolverhampton, Eng., Apr. 17, 1891.
- THOMAS, John Charles (baritone); Meyersdale, Pa., Sept. 6, 1891.
- THOMPSON, Randall (composer); New York City, Apr. 21, 1899.
- THOMSON, Virgil (composer, critic); Kansas City, Mo., Nov. 25, 1896.
- THORBORG, Kerstin (contralto); Venjan, Swed., May. 19, 1906.
- TIBBETT, Lawrence (baritone); Bakersfield, Calif., Nov. 16, 1896.
- TOCH, Ernst (composer); Vienna, Aus., Dec. 7, 1887.
- TOSCANINI, Arturo (conductor); Palma, It., Mar. 25, 1867.
- TOUREL, Jennie (mezzo-soprano); Montreal, Can., June 22, 1910.
- TRAUBEL, Helen (soprano); St. Louis, Mo.
- VARESE, Edgar (composer); Paris, Fr., Dec. 22, 1885.
- VAUGHAN WILLIAMS, Ralph (composer); Down Ampney, Eng., Oct. 12, 1872.
- VILLA-LOBOS, Heitor (composer); Rio de Janeiro, Braz., Mar. 5, 1884.
- WALLENSTEIN, Alfred (conductor, cellist); Chicago, Ill., Oct. 7, 1898.
- WALTER, Bruno (Bruno Walter Schlesinger) (conductor); Berlin, Ger., Sept. 15, 1876.
- WALTON, William (composer); Oldham, Eng., Mar. 29, 1902.
- WARREN, Leonard (baritone); New York City, Apr. 21, 1911.
- WEINBERGER, Jaromir (composer); Prague, Czech., Jan. 8, 1896.
- ZIMBALIST, Efrem (violinist); Rostov-on-Don, Rus., Apr. 9, 1889.

Entertainment

- ABBOTT, Bud (William) (actor); Asbury Park, N. J., Oct. 2, 1898.
- ABBOTT, George (director, playwright); Forestville, N. Y., June 25, 1889.
- ABEL, Walter (actor); St. Paul, Minn., June 6, 1898.
- ADAMS, Maude (actress); Salt Lake City, Utah, Nov. 11, 1872.
- ADLER, Larry (harmonica player); Baltimore, Md., Feb. 10, 1914.
- ADLER, Luther (actor); New York City, May 4, 1903.

- AHERNE**, Brian (actor); Kings Norton, Eng., May 2, 1902.
- ALBERT**, Eddie (Eddie A. Heimberher) (actor); Rock Island, Ill., Apr. 22, 1908.
- ALLEN**, Fred (John F. Sullivan) (actor); Cambridge, Mass., May 31, 1894.
- ALLEN**, Gracie (actress); San Francisco.
- ALLYSON**, June (actress); Westchester Co., N. Y.
- AMECHE**, Don (actor); Kenosha, Wis., May 31, 1908.
- AMOS** (Freeman F. Gosden) (actor); Richmond, Va., May 5, 1899.
- AMSTERDAM**, Morey (comedian); Chicago, Ill., Dec. 14, 1912.
- ANDERSON**, Eddie. *See* Rochester.
- ANDERSON**, Judith (actress); Adelaide, Austr., Feb. 10, 1898.
- ANDREWS**, Dana (actor); Collins, Miss., Jan. 1, 1912.
- ANDREWS**, Laverne (singer); Minneapolis, Minn., July 6, 1915.
- ANDREWS**, Maxene (singer); Minneapolis, Minn., Jan. 3, 1918.
- ANDREWS**, Patricia (singer); Minneapolis, Minn., Feb. 16, 1920.
- ANDY** (Charles J. Correll) (actor); Peoria, Ill., Feb. 2, 1890.
- ARLEN**, Harold (Hyman Arluck) (composer); Buffalo, N. Y., Feb. 15, 1905.
- ARMSTRONG**, Louis (trumpeter); New Orleans, La., July 4, 1900.
- ARNOLD**, Edward (actor); New York City, Feb. 18, 1890.
- ARTHUR**, Jean (Gladys Greene) (actress); New York City, Oct. 17, 1908.
- ASTAIRE**, Fred (Frederick Austerlitz) (dancer); Omaha, Nebr., May 10, 1899.
- AUER**, Mischa (actor); St. Petersburg, Rus., Nov. 17, 1905.
- AUTRY**, Gene (actor); Tioga, Tex., Sept. 29, 1907.
- AYRES**, Lew (actor); Minneapolis, Minn., Dec. 28, 1908.
- BACALL**, Lauren (actress); New York City, Sept. 16, 1924.
- BAINTER**, Fay (actress); Los Angeles, Calif., 1893.
- BAKER**, Kenny (actor, singer); Monrovia, Calif., Sept. 30, 1912.
- BAKER**, Phil (actor); Philadelphia, Pa., Aug. 24, 1898.
- BALANCHINE**, George (ballet director); St. Petersburg, Rus., Jan. 9, 1904.
- BALL**, Lucille (actress); Butte, Mont., Aug. 6, 1911.
- BANKHEAD**, Tallulah (actress); Huntsville, Ala., Jan. 31, 1903.
- BANKS**, Leslie (actor); Liverpool, Eng., June 9, 1890.
- BARRAT**, Robert (actor); New York City, July 10, 1891.
- BARRYMORE**, Diana (actress); New York City, Mar. 3, 1921.
- BARRYMORE**, Ethel (actress); Philadelphia, Pa., Aug. 15, 1879.
- BARRYMORE**, Lionel (actor); Philadelphia, Pa., Apr. 28, 1878.
- BARTHELMLESS**, Richard (actor); New York City, May 9, 1897.
- BARTHOLOMEW**, Freddie (actor); London, Eng., Mar. 28, 1924.
- BARTON**, James (actor); Gloucester, N. J., Nov. 1, 1890.
- BASIE**, Count (William) (band leader); Red Bank, N. J., Aug. 21, 1906.
- BASSERMAN**, Albert (actor); Mannheim, Ger., Sept. 7, 1867.
- BAXTER**, Anne (actress); Michigan City, Ind., May 7, 1923.
- BAXTER**, Warner (actor); Columbus, Ohio, Mar. 29, 1893.
- BELLAMY**, Ralph (actor); Chicago, Ill., June 17, 1905.
- BENDIX**, William (actor); New York City, Jan. 14, 1906.
- BENNETT**, Joan (actress); Palisades, N. J., Feb. 27, 1910.
- BENNY**, Jack (Benny Kubelsky) (actor); Waukegan, Ill., Feb. 14, 1894.
- BERGEN**, Edgar (actor, ventriloquist); Chicago, Ill., Feb. 16, 1903.
- BERGMAN**, Ingrid (actress); Stockholm, Swed., 1917.
- BERGNER**, Elisabeth (actress); Vienna, Aus., Aug. 22, 1900.
- BERLE**, Milton (Milton Berlinger) (actor); New York City, July 12, 1908.
- BERLIN**, Irving (Isidore Baline) (song writer); Russia, May 11, 1888.
- BICKFORD**, Charles (actor); Cambridge, Mass.
- BLAIR**, Janet (actress); Blair, Pa.
- BLONDELL**, Joan (actress); New York City, Aug. 30, 1909.
- BOGART**, Humphrey (actor); New York City, Dec. 25, 1900.
- BOLGER**, Raymond (actor); Dorchester, Mass., Jan. 10, 1906.
- BORZAGE**, Frank (director); Salt Lake City, Utah, Apr. 23, 1893.
- BOYD**, William (actor); Cambridge, Ohio, June 5, 1898.
- BOYER**, Charles (actor); Figeac, Fr., Aug. 28, 1899.
- BOYER**, Lucienne (singer); France.
- BRACKEN**, Eddie (actor); Astoria, N. Y., Feb. 7, 1920.
- BRENNAN**, Walter (actor); Lynn, Mass., July 25, 1894.

- BRENT, Romney (Romulo Larraalde) (actor); Sathillo, Mex., Jan. 26, 1902.
- BRICE, Fanny (Fanny Borach) (actress); New York City, Oct. 29, 1891.
- BROWN, Joe E. (actor); Holgate, Ohio, July 28, 1892.
- BRUCE, Carol (singer); Great Neck, N. Y., Nov. 15, 1919.
- BRUCE, Nigel (actor); San Diego, Calif., Feb. 4, 1895.
- BURKE, Billie (actress); Washington, D. C., Aug. 7, 1886.
- BURNS, Bob (actor); Van Buren, Ark., Oct. 2, 1898.
- BURROWS, Abe (comedian, gag writer); New York City, Dec. 18, 1910.
- CAGNEY, James (actor); New York City, July 17, 1904.
- CALHERN, Louis (actor); New York City, 1895.
- CALLOWAY, Cab (band leader); Rochester, N. Y., Dec. 25, 1907.
- CANOVA, Judy (actress); Jacksonville, Fla., Nov. 20, 1916.
- CANTOR, Eddie (Edward Iskowitz) (actor); New York City, Jan. 31, 1892.
- CAPRA, Frank (director); Palermo, Sicily, May 18, 1897.
- CARLE, Frankie (pianist); Providence, R. I.
- CARMICHAEL, Hoagy (song writer); Bloomington, Ind., Nov. 22, 1899.
- CARRADINE, John (actor); New York City, Feb. 5, 1906.
- CARROLL, Madeleine (actress); Bromwich, Eng., Feb. 26, 1909.
- CARSON, Jack (actor); Carman, Can., Oct. 27, 1910.
- CAVALLERO, Carmen (band leader); New York City, May 6, 1913.
- CHANNING, Carol (comedian); Seattle, Wash., Jan. 31, 1921.
- CHAPLIN, Charles (actor); London, Eng., Apr. 16, 1889.
- CHASE, Ilka (actress); New York City, Apr. 8, 1905.
- CHEVALIER, Maurice (actor); Paris, Fr., Sept. 12, 1888.
- CHRISTIANS, Mady (actress); Vienna, Aus., Jan. 19, 1900.
- CLAIR, René (René Chomette) (director); Paris, Fr., Nov. 11, 1898.
- CLAIRE, Ina (Ina Fagan) (actress); Washington, D. C., Oct. 15, 1892.
- CLARK, Bobby (actor); Springfield, Ohio, June 16, 1888.
- COBURN, Charles (actor); Savannah, Ga., June 19, 1877.
- COLBERT, Claudette (Lily Chauchoin) (actress); Paris, Fr., Sept. 13, 1905.
- COLLINGE, Patricia (actress); Dublin, Ire., Sept. 20, 1894.
- COLMAN, Ronald (actor); Richmond, Eng., Feb. 9, 1891.
- COLONNA, Jerry (comedian); Boston, Mass., Mar. 25, 1903.
- COMO, Perry (Pierino) (singer, actor); Canonsburg, Pa., May 18, 1913.
- CONTE, Richard (actor); New York City, Mar. 24, 1914.
- COOGAN, Jackie (actor); Los Angeles, Calif., Oct. 26, 1914.
- COOPER, Gary (Frank) (actor); Helena, Mont., May 7, 1901.
- COOPER, Jackie (actor); Los Angeles, Calif., Sept. 15, 1922.
- CORBETT, Leonora (actress); London, Eng., June 28, 1908.
- CORNELL, Katharine (actress); Berlin, Ger., Feb. 16, 1898.
- CORRELL, Charles J. See Andy.
- COSTELLO, Lou (Louis Cristillo) (actor); Paterson N. J., Mar. 6, 1908.
- COTTEN, Joseph (actor); Petersburg, Va., 1905.
- CRAIN, Jeanne (actress); Barstow, Calif., May 25, 1925.
- CRAWFORD, Broderick (actor); Philadelphia, Pa., Dec. 9, 1911.
- CRAWFORD, Joan (Lucille LeSueur) (actress); San Antonio, Tex., Mar. 23, 1908.
- CRISP, Donald (actor); London, Eng.
- CROSBY, Bing (Harry) (actor, singer); Tacoma, Wash., May 2, 1904.
- CROSS, Milton (announcer); New York City, Apr. 16, 1897.
- CUGAT, Xavier (orch. ldr.); Barcelona, Sp., Jan. 1, 1900.
- CUMMINGS, Robert (actor); Joplin, Mo., June 9, 1910.
- CURTIZ, Michael (director); Budapest, Hung., Dec. 24, 1888.
- DARNELL, Linda (actress); Dallas, Tex.
- DARRIEUX, Danielle (actress); Bordeaux, Fr., May 1, 1917.
- DAVIS, Bette (actress); Lowell, Mass., Apr. 5, 1908.
- DAVIS, Joan (actress); St. Paul, Minn.
- DAY, Dennis (singer); New York City, May 21, 1917.
- DAY, Doris (singer); Cincinnati, Ohio, Apr. 3, 1924.
- DAY, Laraine (Loraine Johnson) (actress); Roosevelt, Utah, Oct. 13, 1920.
- DE HAVILLAND, Olivia (actress); Tokyo, Jap., July 1, 1916.
- DEMILLE, Agnes (choreographer); New York City.
- DEMILLE, Cecil B. (director); Ashfield, Mass., Aug. 12, 1881.
- DIETRICH, Marlene (Mary Magdalene Von Losch) (actress); Berlin, Ger., Dec. 27, 1904.

- DISNEY**, Walt (animated cartoonist); Chicago, Ill., Dec. 5, 1901.
- DONAT**, Robert (actor); Withington, Eng., Mar. 18, 1905.
- DONLEVY**, Brian (actor); Fortadown, Ire., Feb. 9, 1903.
- DORSEY**, Tommy (band leader); Mahanoy Plane, Pa., Nov. 19, 1905.
- DOUGLAS**, Kirk (actor); Amsterdam, N. Y., Dec. 9, 1916.
- DOUGLAS**, Melvyn (Melvyn Hesselberg) (actor); Macon, Ga., Apr. 5, 1901.
- DOUGLAS**, Paul (actor); Philadelphia, Pa., Apr. 11, 1907.
- DOWLING**, Eddie (actor, director); Woonsocket, R. I., Dec. 9, 1894.
- DOWNEY**, Morton (singer); Wallingford, Conn., Nov. 14, 1902.
- DRAKE**, Alfred (singer, actor); New York City, Oct. 7, 1914.
- DRAPER**, Paul (dancer); Florence, It., Oct. 25, 1911.
- DRAPER**, Ruth (actress); New York City, Dec. 2, 1884.
- DUCHIN**, Eddie (band leader, pianist); Cambridge, Mass., Apr. 1, 1909.
- DUNCAN**, Todd (actor, singer); Danville, Ky., Feb. 12, 1903.
- DUNN**, James (actor); New York City, Nov. 2, 1905.
- DUNNE**, Irene (actress); Louisville, Ky., Dec. 20, 1904.
- DURANTE**, Jimmy (actor); New York City, Feb. 10, 1893.
- DURBIN**, Deanna (Edna) (actress); Winnipeg, Can., Dec. 4, 1922.
- ECKSTINE**, Billy (singer); Pittsburgh, Pa., 1914.
- EDDY**, Nelson (actor, singer); Providence, R. I., June 29, 1901.
- EDWARDS**, Joan (actress); New York City, July 15, 1920.
- ELLINGTON**, Duke (band leader); Washington, D. C., Apr. 29, 1899.
- ELLIOTT**, Bill (actor); Pattonsburg, Mo.
- EMERSON**, Faye (actress); Elizabeth, La., July 8, 1917.
- EVANS**, Maurice (actor); Dorchester, Eng., June 3, 1901.
- FAIRBANKS**, Douglas, Jr., (actor); New York City, Dec. 9, 1909.
- FALKENBURG**, Jinx (Eugenia) (actress); Barcelona, Sp., Jan. 21, 1919.
- FAY**, Frank (actor); San Francisco, Calif., Nov. 17, 1897.
- FAYE**, Alice (Alice Leppert) (actress); New York City, May 5, 1915.
- FERRER**, Jose (actor); Puerto Rico, 1909.
- FIELD**, Betty (actress); Boston, Mass., Feb. 8, 1918.
- FIELDS**, Gracie (actress); Rochdale, Eng., Jan. 9, 1898.
- FITZGERALD**, Barry (William J. Shields) (actor); Dublin, Ire., Mar. 1888.
- FITZGERALD**, Ella (singer); Newport News, Va., Apr. 25, 1918.
- FITZGERALD**, Geraldine (actress); Dublin, Ire., Nov. 24, 1914.
- FLAHERTY**, Robert (director); Iron Mountain, Mich., Feb. 16, 1884.
- FLYNN**, Errol (actor); Hobart, Tasmania, June 20, 1909.
- FONDA**, Henry (actor); Grand Island, Nebr., May 16, 1905.
- FONTAINE**, Joan (actress); Tokyo, Jap., Oct. 22, 1917.
- FONTANNE**, Lynn (actress); London, Eng., 1887.
- FORD**, Glenn (Gwyllyn Ford) (actor); Quebec, Can., May 1, 19??.
- FORD**, John (director); Cape Elizabeth, Maine, Feb. 1, 1895.
- FOSTER**, Preston (actor); Ocean City, N. J., Aug. 24, 1902.
- FOY**, Eddie, Jr., (actor, dancer); New Rochelle, N. Y., Feb. 4, 1905.
- FRANCIS**, Kay (Katherine Gibbs) (actress); Oklahoma City Okla., Jan. 13, 1905.
- FRIML**, Rudolf (operetta composer); Prague, Czech., Dec. 7, 1884.
- FROMAN**, Jane (singer); St. Louis, Mo., Nov. 10, 1911.
- GABIN**, Jean (actor); Paris, Fr., May 17, 1904.
- GABLE**, Clark (actor); Cadiz, Ohio, Feb. 1, 1901.
- GARBO**, Greta (Greta Gustafsson) (actress); Stockholm, Swed., Sept. 18, 1905.
- GARDINER**, Reginald (actor); Wimbledon, Eng., Feb. 27, 1903.
- GARDNER**, Ed (Edward Poggenberg) (actor); Astoria, N. Y., June 29, 1905.
- GARFIELD**, John (Julius Garfinkle) (actor); New York City, Mar. 4, 1913.
- GARLAND**, Judy (Frances Gumm) (actress); Grand Rapids, Minn., June 10, 1922.
- GARSON**, Greer (actress); County Down, Ire.
- GAXTON**, William (Arturo Caxiola) (actor); San Francisco, Calif., Dec. 2, 1893.
- GEORGE**, Gladys (Gladys Clare) (actress); Patton, Maine, Sept. 13, 1904.
- GERSHWIN**, Ira (lyricist); New York City, Dec. 6, 1896.
- GIELGUD**, John (actor); London, Eng., Apr. 14, 1904.
- GISH**, Dorothy (actress); Massillon, Ohio, Mar. 11, 1898.
- GISH**, Lillian (actress); Springfield, Ohio, Oct. 14, 1896.

- GLEASON, James (actor); New York City, May 23, 1886.
- GODDARD, Paulette (actress); Great Neck, N. Y., June 3, 1911.
- GODFREY, Arthur (radio broadcaster); New York City, Aug. 31, 1903.
- GOLDEN, John (producer); New York City, June 27, 1874.
- GOLDWYN, Samuel (Samuel Goldfish) (producer); Warsaw, Pol., 1882.
- GOODMAN, Benny (band leader); Chicago, Ill., May 30, 1909.
- GORDON, Max (producer); N. Y. C., 1892.
- GORDON, Ruth (actress); Wollaston, Mass., Oct. 30, 1896.
- GODSEN, Freeman F. *See* Amos.
- GOULD, Morton (composer); Richmond Hill, N. Y., Dec. 10, 1913.
- GRABLE, Betty (actress); St. Louis, Mo., Dec. 18, 1916.
- GRAHAM, Martha (choreographer); Pittsburgh, Pa.
- GRANGER, Farley (actor); San Jose, Calif., July 1, 1925.
- GRANGER, Stewart (James Stewart) (actor); May 6, 1913.
- GRANT, Cary (Archibald A. Leach) (actor); Bristol, Eng., Jan. 18, 1904.
- GRAYSON, Kathryn (Zelma Hedrick) (actress); Winston-Salem, N. C.
- GREENSTREET, Sydney (actor); Sandwich, Eng., Dec. 27, 1879.
- GUINNESS, Alec (actor); Marylebone, London, Eng., Apr. 2, 1914.
- GUITRY, Sacha (Alexandre) (director); St. Petersburg, Rus., Feb. 21, 1885.
- GWENN, Edmund (actor); London, Eng., Sept. 26, 1877.
- HALEY, Jack (actor); Boston, Mass., Aug. 10, 1902.
- HAMMERSTEIN, Oscar, II (librettist); New York City, July 12, 1895.
- HAMPDEN, Walter (Walter Hampden Dougherty) (actor); Brooklyn, N. Y., June 30, 1879.
- HANDY, William C. (blues composer); Florence, Ala., Nov. 16, 1873.
- HARDWICKE, Sir Cedric (actor); Lye, Eng., Feb. 19, 1893.
- HARRIS, Phil (band leader); Linton, Ind., June 24, 1906.
- HARRISON, Rex (actor); Huyton, Eng., Mar. 5, 1908.
- HAYES, Helen (Helen Brown) (actress); Washington, D. C., Oct. 10, 1900.
- HAYMES, Dick (singer); Tarrytown, N. Y.
- HAYWARD, Susan (Edythe Marrener) (actress); Brooklyn, N. Y., Jan. 30, 1918.
- HAYWORTH, Rita (Margarita Cansino) (actress); N. Y. C., Oct. 17, 1918.
- HEFLIN, Van (actor); Walters, Okla., Dec. 13, 1910.
- HENIE, Sonja (actress, skater); Oslo, Nor., Apr. 8, 1913.
- HENREID, Paul (actor); Trieste, It., Jan. 10, 1908.
- HEPBURN, Katharine (actress); Hartford, Conn., 1909.
- HERMAN, Woody (band ldr.); Milwaukee, Wis., May 16, 1913.
- HERSHOLT, Jean (actor); Copenhagen, Den., July 12, 1886.
- HILDEGARDE (Hildegard Loretta Sell) (entertainer); Adell, Wis., Feb. 1, 1906.
- HILLER, Wendy (actress); Branhall, Eng., Aug. 15, 1912.
- HILLIARD, Harriet (Peggy Lou Snyder) (actress, singer); Des Moines, Iowa.
- HITCHCOCK, Alfred J. (director); England, Aug. 13, 1899.
- HOLDEN, William (actor); O'Fallon, Ill., Apr. 17, 1918.
- HOLLIDAY, Billie (singer); Baltimore, Md., 1919(?).
- HOLLIDAY, Judy (actress); New York City, June 21, 1923.
- HOLM, Celeste (actress, singer); New York City, Apr. 29, 1919.
- HOLT, Jack (actor); Winchester, Va., May 31, 1888.
- HOLT, Tim (actor); Beverly Hills, Calif., Feb. 5, 1918.
- HOMOLKA, Oscar (actor); Vienna, Aus., 1901.
- HOPE, Bob (actor); London, Eng., May 29, 1903.
- HOPKINS, Miriam (actress); Bainbridge, Ga., Oct. 18, 1902.
- HORNE, Lena (actress, singer); Brooklyn, N. Y., 1918.
- HORTON, Edward Everett (actor); Brooklyn, N. Y., Mar. 18, 1887.
- HULL, Henry (actor); Louisville, Ky., Oct. 3, 1890.
- HULL, Josephine (actress); Newtonville, Mass., Jan. 3, 1886.
- HUNT, Marsha (actress); Chicago, Ill., Oct. 17, 1917.
- HUNTER, Ian (actor); Cape Town, S. Af., June 13, 1900.
- HUSSEY, Ruth (actress); Providence, R. I.
- HUSTON, John (director); Nevada, Mo., Aug. 5, 1906.
- HUTTON, Betty (Betty Thornberg) (actress, singer); Battle Creek, Mich., Feb. 26, 1921.
- IVES, Burl (folksinger); Hunt, Ill., June 14, 1909.
- JAFFE, Sam (actor); New York City, Mar. 8, 1898.

- JAGGER, Dean (actor); Lima, Ohio, Nov. 7, 1903.
- JAMES, Harry (band leader); Albany, Ga., Mar. 15, 1916.
- JANIS, Elsie (Elsie Bierbower) (actress); Columbus, Ohio, Mar. 16, 1889.
- JESSEL, George (actor); New York City, Apr. 3, 1898.
- JOHNSON, Celia (actress); Richmond, Eng., Dec. 18, 1908.
- JOHNSON, Chick (Harold) (actor); Chicago, Ill., Mar. 5, 1895.
- JOHNSON, Van (actor); Newport, R. I., Aug. 20, 1916.
- JONES, Jennifer (Phyllis Isley) (actress); Tulsa, Okla., Mar. 2, 1919.
- JORDAN, James. *See* McGee.
- JORDAN, Marian. *See* McGee.
- JORY, Victor (actor); Dawson, Can., Nov. 23, 1902.
- JOURLAN, Louis (actor); Marseille, Fr., June 18, 1921.
- KARLOFF, Boris (Charles E. Pratt) (actor); Dulwich, Eng., Nov. 23, 1887.
- KAYE, Danny (actor); Brooklyn, N. Y., Jan. 18, 1913.
- KAZAN, Elia (director); Istanbul, Turk., Sept. 7, 1909.
- KEATON, Buster (actor); Pickway, Kans., Oct. 4, 1896.
- KELLY, Gene (actor); Pittsburgh, Pa., Aug. 23, 1912.
- KELLY, Paul (actor); Brooklyn, N. Y., Aug. 8, 1899.
- KENNEDY, Arthur (actor); Worcester, Mass., Feb. 17, 1914.
- KERR, Deborah (actress); Helensburgh, Scot., Sept. 30, 1921.
- KING, Dennis (actor); Coventry, Eng., Nov. 2, 1897.
- KING, Henry (director); Christianburg, Va., Jan. 24, 1896.
- KNOX, Alexander (actor); Strathroy, Can., Jan. 18, 1907.
- KORDA, Sir Alexander (producer); Turkeve, Hung., Sept. 16, 1893.
- KRAMER, Stanley E. (producer); New York City, Sept. 29, 1913.
- KRUGER, Otto (actor); Toledo, Ohio, Sept. 6, 1885.
- KRUPA, Gene (band ldr.); Chicago, Ill., Jan. 15, 1909.
- KYSER, Kay (band leader); Rocky Mount, N. C., June 18, 1905.
- LADD, Alan (actor); Hot Springs, Ark., Sept. 3, 1913.
- LAHR, Bert (Irving Lashrheim) (actor); New York City, Aug. 13, 1895.
- LAKE, Veronica (Constance Keane) (actress); Lake Placid, N. Y., Nov. 14, 1919.
- LAMARR, Hedy (actress); Vienna, Aus.
- LAMOUR, Dorothy (actress); New Orleans, La., Dec. 10, 1914.
- LANCASTER, Burt (actor); New York City, Nov. 2, 1913.
- LANCHESTER, Elsa (Elsa Sullivan) (actress); London, Eng., Oct. 28, 1902.
- LANG, Fritz (director); Vienna, Aus., Dec. 5, 1890.
- LANGFORD, Frances (singer); Lakeland, Fla., Apr. 4, 1913.
- LAUGHTON, Charles (actor); Scarborough, Eng., July 1, 1899.
- LAWFORD, Peter (actor); London, Eng., Sept. 7, 1923.
- LAWRENCE, Gertrude (Gertrud Klasen) (actress); London, Eng., July 4, 1900.
- LEE, Canada (actor); New York City, Mar. 2, 1907.
- LEE, Gypsy Rose (Rose Hovic) (actress); Seattle, Wash., Feb. 9, 1914.
- LE GALLIENNE, Eva (actress, director); London, Eng., Jan. 11, 1899.
- LEIGH, Vivien (Vivian Hartley) (actress); Darjeeling, India, Nov. 5, 1913.
- LEROY, Mervyn (producer, director); San Francisco, Calif., Oct. 15, 1900.
- LESLIE, Joan (Joan Brodell) (actress); Detroit, Mich., Jan. 26, 1925.
- LEVENE, Sam (actor); New York City, 1907.
- LEWIS, Jerry (comedian); Newark, N. J., Mar. 16, 1926.
- LEWIS, Joe E. (comedian); New York City.
- LILLIE, Beatrice (actress); Toronto, Can., May 29, 1898.
- LIVESY, Roger (actor); Barry, Wales, June 25, 1906.
- LLOYD, Harold (actor); Burchard, Nebr., Apr. 20, 1894.
- LOCKHART, Gene (actor); London, Can., July 25, 1892.
- LOCKHART, June (actress); New York City, June 25, 1925.
- LOCKWOOD, Margaret (actress); Karachi, India, 1916.
- LOGAN, Joshua (director, playwright); Texarkana, Tex., Oct. 5, 1908.
- LOMBARDO, Guy (band leader); London, Can., June 19, 1902.
- LOPEZ, Vincent (band leader); Brooklyn, N. Y., Dec. 10, 1898.
- LORRE, Peter (actor); Rosenberg, Hung., June 26, 1904.
- LOY, Myrna (Myrna Williams) (actress); near Helena, Mont., Aug. 2, 1905.
- LUGOSI, Bela (Bela Lugosi Blasko) (actor); Lugos, Hung., Oct. 20, 1888.
- LUKAS, Paul (actor); Budapest, Hung., May 26, 1895.
- LUND, John (actor); Rochester, N. Y., Feb. 6, 1914.

- LUNT, Alfred (actor); Milwaukee, Wis., 1893.
- LUPINO, Ida (actress); London, Eng., Feb. 4, 1918.
- LYNN, Diana (Dolly Loehr) (actress); Los Angeles, Calif., Oct. 7, 1926.
- LYTELL, Bert (actor, director); New York City, 1885.
- MCCAMBRIDGE, Mercedes (actress); Joliet, Ill., Mar 17, 1918.
- MCCAREY, Leo (director); Los Angeles, Calif., Oct. 3, 1893.
- MCCREA, Joel (actor); Los Angeles, Calif., Nov. 5, 1906.
- MACDONALD, Jeanette (actress, soprano); Philadelphia, Pa., June 18, 1907.
- MCDOWALL, Roddy (actor); London, Eng., Sept. 17, 1928.
- McGEE, Fibber (James Jordan) (actor); Peoria, Ill., Nov. 16, 1896.
- McGEE, Molly (Marian Jordan) (actress); Peoria, Ill., Apr. 15, 1898.
- McGUIRE, Dorothy (actress); Omaha, Nebr., June 14, 1919.
- McLAGLEN, Victor (actor); Tunbridge Wells, Eng., Dec. 11, 1886.
- MacMURRAY, Fred (actor); Kankakee, Ill., Aug. 30, 1908.
- McRAE, Gordon (singer); East Orange, N. J., Mar. 12, 1921.
- MANKIEWICZ, Joseph L. (director); Wilkes-Barre, Pa., Feb. 11, 1909.
- MARCH, Fredric (Frederick Bickel) (actor); Racine, Wis., Aug. 31, 1897.
- MARGO (Maria Boldao y Castilla) (actress); Mexico City, May 10, 1918.
- MARKOVA, Alicia (dancer); London, Eng., Dec. 1, 1910.
- MARSHALL, Herbert (actor); London, Eng., May 23, 1890.
- MARTIN, Dean (comedian); Steubenville, Ohio, June 7, 1917.
- MARTIN, Mary (actress); Weatherford, Tex., Dec. 1, 1914.
- MARTIN, Tony (actor, singer); San Francisco, Calif., Dec. 25, 1914.
- MARX, Chico (Leonard) (actor); New York City, Mar. 22, 1891.
- MARX, Groucho (Julius) (actor); New York City, Oct. 2, 1895.
- MARX, Harpo (Arthur) (actor); New York City, Nov. 23, 1893.
- MASON, James (actor); Huddersfield, Eng., May 15, 1909.
- MASSEY, Ilona (Ilona Hajmassy) (actress); Hungary, 1910.
- MASSEY, Raymond (actor); Toronto, Can., Aug. 30, 1896.
- MASSINE, Léonide (choreographer); Moscow, Rus., Aug. 9, 1896.
- MATURE, Victor (actor); Louisville, Ky., Jan. 29, 1916.
- MAYER, Louis B. (producer); Minsk, Rus., July 4, 1885.
- MAYO, Virginia (Virginia Jones) (actress); St. Louis, Mo., Nov. 30, 1920.
- MENJOU, Adolphe (actor); Pittsburgh, Pa., Feb. 18, 1890.
- MEREDITH, Burgess (actor); Cleveland, Ohio, Nov. 16, 1908.
- MERMAN, Ethel (Ethel Zimmerman) (actress, singer); Astoria, N. Y., Jan. 16, 1909.
- MILLAND, Ray (Jack Millane) (actor); Neath, Wales, Jan. 3, 1907.
- MILLS, John (actor); Suffolk, Eng., Feb. 22, 1908.
- MIRANDA, Carmen (Maria do Carmo Miranda da Cunha) (actress, singer); Marco Canavezes, Port., 1915.
- MITCHELL, Thomas (actor); Elizabeth, N. J., July 11, 1895.
- MITCHUM, Robert (actor); Rising Sun, Del.
- MONTGOMERY, Robert (Henry, Jr.) (actor); Beacon, N. Y., May 21, 1904.
- MOORE, Victor (actor); Hammonton, N. J., Feb. 24, 1876.
- MORGAN, Dennis (Stanley Morner) (actor); Prentice, Wis., Dec. 10, 1920.
- MORGAN, Henry (Henry von Ost, Jr.) (comedian); N. Y. C., Mar. 31, 1915.
- MORGAN, Michele (Simone Roussel) (actress); Paris, Fr., Feb. 29, 1920.
- MORGAN, Ralph (actor); New York City, July 6, 1888.
- MORISON, Patricia (actress); New York City, 1919.
- MORLEY, Robert (actor); Wiltshire, Eng., May 26, 1908.
- MUNI, Paul (Muni Weisenfreund) (actor); Lemberg, Aus., Sept. 22, 1895.
- MURPHY, George (actor); New Haven, Conn., July 4, 1904.
- MURRAY, Arthur (dancing teacher); New York City, Apr. 4, 1895.
- NAISH, J. Carrol (actor); New York City, Jan. 21, 1900.
- NATHAN, George Jean (critic); Ft. Wayne, Ind., Feb. 14, 1882.
- NATWICK, Mildred (actress); Baltimore, Md., June 19, 1908.
- NEAGLE, Anna (Marjorie Robertson) (actress); nr. London, Eng., Oct. 20, 1904.
- NEGRI, Pola (Appollonia Chalupec) (actress); Lipno, Pol., 1899.
- NELSON, Ozzie (Oswald) (actor, band ldr.); Jersey City, N. J., 1906.
- NICHOLS, Dudley (producer, director); Wapakoneta, Ohio, Apr. 6, 1895.
- NIVEN, David (actor); Scotland.
- NOBLE, Ray (band ldr.); Brighton, Eng., Dec. 17, 1908.

- NUGENT, Elliott (actor, director); Dover, Ohio, Sept. 20, 1899.
- OAKIE, Jack (Lewis Offield) (actor); Sedalia, Mo., Nov. 12, 1903.
- OBERON, Merle (Merle O'Brien Thompson) (actress); Tasmania, Feb. 19, 1911.
- O'BRIEN, Margaret (actress); Los Angeles, Calif., Jan. 15, 1937.
- O'BRIEN, Pat (actor); Milwaukee, Wis., Nov. 11, 1899.
- O'HARA, Maureen (Maureen Fitzsimmons) (actress); Dublin, Ire., Aug. 17, 1920.
- OLIVIER, Sir Laurence (actor); Dorking, Eng., May 23, 1907.
- OLSEN, Ole (John) (actor); Wabash, Ind., Nov. 6, 1892.
- O'SULLIVAN, Maureen (actress); Boyle, Ire., May 17, 1911.
- OWEN, Reginald (actor); Wheathampstead, Eng., Aug. 5, 1887.
- PALMER, Lilli (actress); Posen, Germany, May 27, 1917.
- PARKER, Jean (Mae Green) (actress); Deer Lodge, Mont.
- PARKS, Larry (actor); Olathe, Kans.
- PASTERNAK, Joseph (producer); Simleul-Silvaniei, Rum., Sept. 19, 1901.
- PAXINOU, Katina (actress); Piraeus, Greece.
- PAYNE, John (actor); Roanoke, Va.
- PECK, Gregory (actor); La Jolla, Calif., Apr. 5, 1916.
- PIAF, Edith (singer); Paris, Fr.
- PICKFORD, Mary (Gladys Mary Smith) (actress); Toronto, Can., Apr. 8, 1893.
- PIDGEON, Walter (actor); East St. John, Can., Sept. 23, 1898.
- PORTER, Cole (song writer); Peru, Ind., June 9, 1893.
- POWELL, Dick (actor); Mt. View, Ark., Nov. 14, 1904.
- POWELL, William (actor); Pittsburgh, Pa., July 29, 1892.
- POWER, Tyrone (actor); Cincinnati, Ohio, May 5, 1914.
- PREMINGER, Otto (producer, director); Vienna, Aus., Dec. 5, 1906.
- PRICE, Vincent (actor); St. Louis, Mo., May 27, 1911.
- RAFT, George (actor); New York City, Sept. 27, 1922.
- RAINER, Luise (actress); Vienna, Aus., 1912.
- RAINS, Claude (actor); London, Eng., Nov. 10, 1889.
- RANK, J. Arthur (producer); Hull, Eng., Dec. 23, 1888.
- RATHBONE, Basil (actor); Johannesburg, U. of S. A., June 13, 1892.
- RATOFF, Gregory (director); St. Petersburg, Rus., Apr. 20, 1897.
- REAGAN, Ronald (actor); Tampico, Ill.
- REDGRAVE, Michael (actor); Bristol, Eng., Mar. 20, 1908.
- RICE, Florence (actress); Cleveland, Ohio, Feb. 14, 1911.
- RICHARDSON, Ralph (actor); Cheltenham, Eng., Dec. 19, 1902.
- ROBBINS, Jerome (Jerome Rabinowitz) (choreographer); New York City, Oct. 11, 1918.
- ROBINSON, Edward G. (Emanuel Goldenberg) (actor); Bucharest, Rum., Dec. 12, 1893.
- ROBSON, Flora (actress); South Shields, Eng., Mar. 28, 1902.
- ROCHESTER (Eddie Anderson) (comedian); Oakland, Calif., Sept. 18, 1905.
- RODGERS, Richard (song writer); New York City, June 28, 1902.
- ROGERS, Ginger (Virginia McMath) (actress, dancer); Independence, Mo., July 16, 1911.
- ROGERS, Roy (Leonard Slye) (actor); Cincinnati, Ohio, Nov. 5, 1912.
- ROMAN, Ruth (actress); Boston, Mass., Dec. 23, 1924.
- ROMBERG, Sigmund (operetta composer); Szeged, Hung., July 29, 1887.
- ROMERO, Cesar (actor); New York City, Feb. 15, 1907.
- ROONEY, Mickey (Joe Yule, Jr.) (actor); Brooklyn, N. Y., Sept. 23, 1922.
- ROSE, Billy (William S. Rosenberg) (producer); New York City, Sept. 6, 1899.
- ROSSELLINI, Roberto (director); Rome, It., May 8, 1906.
- RUGGLES, Charles (actor); Los Angeles, Calif., Feb. 8, 1892.
- RUSSELL, Rosalind (actress); Waterbury, Conn., June 4, 1912.
- RYAN, Robert (actor); Chicago, Ill., Nov. 11, 1913.
- SABLON, Jean (singer); Paris, Fr., Mar. 25, 1912.
- ST. DENIS, Ruth (Ruth Denis) (dancer); Newark, N. J., Jan. 20, 1880.
- SANDERS, George (actor); St. Petersburg, Rus., 1906.
- SAVO, Jimmie (entertainer); New York City, 1895.
- SCHARY, Dore (producer); Newark, N. J., Aug. 31, 1905.
- SCHILDKRAUT, Joseph (actor); Vienna, Aus., Mar. 22, 1895.
- SCOTT, Hazel (pianist); Port of Spain, Trin., June 11, 1920.
- SCOTT, Martha (actress); Jamesport, Mo., Sept. 22, 1916.
- SCOTT, Raymond (band leader); Brooklyn, N. Y., Sept. 10, 1909.
- SCOTT, Zachary (actor); Austin, Tex., Feb. 24, 1914.

- SELZNICK, David O. (producer); Pittsburgh, Pa., May 10, 1902.
- SHAW, Artie (clarinetist); New York City, May 23, 1910.
- SHAWN, Ted (Edwin) (dancer); Kansas City, Mo., Oct. 21, 1891.
- SHEARER, Norma (actress); Montreal, Can., Aug. 10, 1902.
- SHERIDAN, Ann (actress); Denton, Tex., Feb. 21, 1915.
- SHIRLEY, Anne (Dawn Paris) (actress); New York City, Apr. 17, 1918.
- SHORE, Dinah (actress, singer); Winchester, Tenn., Mar. 1, 1917.
- SIDNEY, Sylvia (Sophia Koskow) (actress); New York City, Aug. 8, 1910.
- SINATRA, Frank (actor, singer); Hoboken, N. J., 1918.
- SKELTON, Red (Richard) (actor); Vincennes, Ind., July 18, 1913.
- SKINNER, Cornelia Otis (actress); Chicago, Ill., May 30, 1901.
- SLEEPER, Martha (actress); Lake Bluff, Ill., June 24, 1911.
- SLEZAK, Walter (actor); Vienna, Aus., May 3, 1902.
- SMITH, Kate (Kathryn) (singer); Washington, D. C., 1910.
- SOKOLOFF, Vladimir (actor); Moscow, Rus., Dec. 26, 1889.
- SOTHERN, Ann (Harriet Lake) (actress); Valley City, N. Dak., Jan. 22, 1911.
- STANWYCK, Barbara (Ruby Stevens) (actress); Brooklyn, N. Y., July 16, 1907.
- STEWART, James (actor); Indiana, Pa., May 20, 1908.
- STICKNEY, Dorothy (actress); Dickinson, N. Dak., June 21, 1900.
- STONE, Ezra (actor, director); New Bedford, Mass., Dec. 2, 1917.
- STONE, Fred A. (actor); Valmont, Colo., Aug. 19, 1873.
- STURGES, Preston (Preston Blden) (playwright, director); Chicago, Ill., Aug. 29, 1898.
- SULLAVAN, Margaret (actress); Norfolk, Va., May 16, 1911.
- SWANSON, Gloria (Josephine Swenson) (actress); Chicago, Ill., Mar. 27, 1898.
- TANDY, Jessica (Jessica Cronyn) (actress); London, Eng., June 7, 1909.
- TAYLOR, Robert (S. Arlington Brugh) (actor); Filley, Nebr., Aug. 5, 1911.
- TEARLE, Godfrey (actor); New York City, Oct. 12, 1884.
- TEMPLE, Shirley (actress); Santa Monica, Calif., Apr. 23, 1928.
- THORNHILL, Claude (band ldr.); Terre Haute, Ind., Aug. 10, 1908.
- TIERNEY, Gene (actress); Brooklyn, N. Y., Nov. 20, 1920.
- TODD, Ann (actress); Hartford, Cheshire, Eng., Jan. 24, 1910.
- TONE, Franchot (actor); Niagara Falls, N. Y., Feb. 27, 1905.
- TRACY, Spencer (actor); Milwaukee, Wis., Apr. 5, 1900.
- TRAVERS, Henry (actor); Ireland.
- TREACHER, Arthur V. (actor); Brighton, Eng.
- TREVOR, Claire (actress); New York City, Mar. 8, 1909.
- TRUEX, Ernest (actor); Kansas City, Mo., Sept. 19, 1890.
- TUCKER, Sophie (Sophie Abuza) (actress, entertainer); Russia, 1884.
- TUFTS, Sonny (actor); Boston, Mass.
- TURNER, Lana (Julia Jean Turner) (actress); Wallace, Idaho, Feb. 8, 1920.
- VALLEE, Rudy (Hubert) (actor, band leader); Island Pond, Vt., July 28, 1901.
- VENUTA, Benay (singer); San Francisco, Calif., Jan. 27, 1912.
- VIDOR, King (director, producer); Galveston, Tex., Feb. 8, 1895.
- VON STROHEIM, Erich (actor, director); Vienna, Aus., Sept. 22, 1885.
- WALKER, Nancy (Ann Myrtle Swoyer) (actress); Philadelphia, Pa.
- WALKER, Robert (actor); Salt Lake City, Utah.
- WARING, Fred (band leader); Tyrone, Pa., June 9, 1900.
- WATERS, Ethel (actress, singer); Chester, Pa., Oct. 31, 1900.
- WAYNE, David (actor); Traverse City, Mich., Jan. 30, 1914.
- WEBB, Clifton (actor); Indiana, 1891.
- WEBSTER, Margaret (actress, director); New York City, Mar. 15, 1905.
- WELLES, Orson (actor, director); Kenosha, Wis., May 6, 1915.
- WEST, Mae (actress); Brooklyn, N. Y., Aug. 17, 1892.
- WHITEMAN, Paul (band leader); Denver, Colo., 1891.
- WHORF, Richard (actor); Winthrop, Mass.
- WIDMARK, Richard (actor); Sunrise, Minn., Dec. 26, 1914.
- WILDE, Cornel (actor); New York City, Oct. 13, 1915.
- WILLIAMS, Esther (actress, swimmer); Los Angeles, Calif.
- WINNINGER, Charles (actor); Athens, Wis., May 26, 1884.
- WOOD, Peggy (actress); Brooklyn, N. Y., Feb. 9, 1892.
- WOOLLEY, Monte (Edgar) (actor); New York City, Aug. 17, 1888.
- WRIGHT, Teresa (actress); New York City, Oct. 27, 1918.

WYATT, Jane (actress); Campgaw, N. J., Aug. 12, 1912.
 WYLER, William (director); Mulhouse, Fr., July 1, 1902.
 WYMAN, Jane (Sarah Fuls) (actress); St. Joseph, Mo., Jan. 4, 1914.
 WYNN, Ed (Edwin Leopold) (actor); Philadelphia, Pa., Nov. 9, 1886.
 WYNN, Keenan (actor); New York City, July 27, 1916.
 YOUNG, Loretta (Gretchen) (actress); Salt Lake City, Utah, Jan. 6, 1913.

YOUNG, Robert (actor); Chicago, Ill., Feb. 22, 1907.
 YOUNG, Roland (actor); London, Eng., Nov. 11, 1887.
 YURKA, Blanche (actress); St. Paul, Minn., June 19, 1893.
 ZANUCK, Darryl F. (director); Wahoo, Nebr., Sept. 5, 1902.
 ZORINA, Vera (Eva Hartwig) (dancer); Kristiansand, Nor., Jan. 2, 1917.
 ZUKOR, Adolph (producer); Ricse, Hung., Jan. 7, 1873.

Literature

ADAMIC, Louis (novelist); Blato, Dalmatia, Mar. 23, 1899.
 ADAMS, Franklin P. (columnist); Chicago, Ill., Nov. 15, 1881.
 ADAMS, Samuel Hopkins (novelist); Dunkirk, N. Y., Jan. 26, 1871.
 ADLER, Mortimer J. (philosopher); New York City, Dec. 28, 1902.
 AIKEN, Conrad (poet); Savannah, Ga., Aug. 5, 1889.
 AKINS, Zoë (playwright); Humansville, Mo., Oct. 30, 1886.
 ALDINGTON, Richard (poet); Hampshire, Eng., 1892.
 AMORY, Cleveland (novelist); Nahant, Mass., Sept. 2, 1917.
 ANDERSON, Maxwell (playwright); Atlantic, Pa., Dec. 15, 1888.
 ARAGON, Louis (poet); France, 1895.
 ASCH, Sholem (novelist); Kutno, Pol., Nov. 1, 1880.
 AUDEN, Wystan Hugh (poet); York, Eng., Feb. 21, 1907.
 BALDWIN, Faith (novelist); New Rochelle, N. Y., Oct. 1, 1893.
 BARNES, Margaret Ayer (novelist); Chicago, Ill., Apr. 8, 1886.
 BAUM, Vicki (novelist); Vienna, Aus., Jan. 24, 1896.
 BEARD, Mary R. (sociologist); Indianapolis, Ind., Aug. 5, 1876.
 BEERBOHM, Sir Max (novelist); London, Eng., Aug. 24, 1872.
 BEHRMAN, Samuel N. (playwright); Worcester, Mass., June 9, 1893.
 BEMELMANS, Ludwig (essayist); Meran, Tirol, Apr. 27, 1898.
 BENAVENTE & MARTÍNEZ, Jacinto (playwright); Madrid, Sp., Aug. 12, 1866.
 BOTTOME, Phyllis (novelist); Rochester, Eng., May 31, 1884.
 BOYLE, Kay (novelist, poet); St. Paul, Minn., Feb. 19, 1903.
 BRECHT, Bertolt (playwright); Augsburg, Bavaria, 1898.

BROMFIELD, Louis (novelist); Mansfield, Ohio, Dec. 27, 1896.
 BROOKS, Van Wyck (critic); Plainfield, N. J., Feb. 16, 1886.
 BROWN, John Mason (drama critic); Louisville, Ky., July 3, 1900.
 BUCK, Pearl S. (novelist); Hillsboro, W. Va., June 26, 1892.
 BUNIN, Ivan (novelist); Voronezh, Rus., Oct. 10, 1870.
 CABELL, James Branch (novelist); Richmond, Va., Apr. 14, 1879.
 CAIN, James M. (novelist); Annapolis, Md., July 1, 1892.
 CALDWELL, Erskine (novelist); White Oak, Ga., Dec. 17, 1903.
 CAMUS, Albert (novelist); Algiers, 1913.
 CANBY, Henry Seidel (critic); Wilmington, Del., Sept. 6, 1878.
 CAPOTE, Truman (novelist); New Orleans, La., Sept. 30, 1924.
 CARROLL, Paul Vincent (playwright); Dundalk, Ire., July 10, 1900.
 CHASE, Stuart (economist); Somersworth, N. H., Mar. 8, 1888.
 CHRISTIE, Agatha (novelist); Torquay, Eng., 189?.
 COCTEAU, Jean (poet, playwright); Maisons-Laffitte, Fr., July 5, 1891.
 COFFIN, Robert P. T. (poet); Brunswick, Maine, Mar. 18, 1892.
 COLUM, Padraic (poet, playwright); Longford, Ire., Dec. 8, 1881.
 COMMAGER, Henry S. (historian); Pittsburgh, Pa., Oct. 25, 1902.
 CONNELLY, Marc (playwright); McKeesport, Pa., Dec. 13, 1890.
 CORWIN, Norman (radio dramatist); Boston, Mass., May 3, 1910.
 COSTAIN, Thomas Bertram (novelist); Brantford, Can., May 8, 1885.
 COWARD, Noel (playwright); Teddington, Eng., Dec. 16, 1899.
 COWLEY, Malcolm (critic, editor); Bel-sano, Pa., Aug. 24, 1898.

- COZZENS, James Gould (novelist); Chicago, Ill., Aug. 19, 1903.
- CROCE, Benedetto (philosopher); Pescasseroli, It., Feb. 25, 1866.
- CRONIN, Archibald J. (novelist); Cardross, Scot., July 19, 1896.
- CROTHERS, Rachel (playwright); Bloomington, Ill., Dec. 12, 1878.
- CROUSE, Russel (playwright); Findlay, Ohio, Feb. 20, 1893.
- CUMMINGS, Edward E. (poet); Cambridge, Mass., Oct. 14, 1894.
- DAVENPORT, Marcia (novelist); New York City, June 9, 1903.
- DAVIS, Elmer (novelist, essayist); Aurora, Ind., Jan. 13, 1890.
- DE LA MARE, Walter (poet); Charlton, Eng., Apr. 25, 1873.
- DEUTSCH, Babette (poet, novelist); New York City, Sept. 22, 1895.
- DE VOTO, Bernard (novelist, critic); Ogden, Utah, Jan. 11, 1897.
- DEWEY, John (philosopher); Burlington, Vt., Oct. 20, 1859.
- DOS PASSOS, John (novelist); Chicago, Ill., Jan. 14, 1896.
- DOUGLAS, Lloyd (novelist); Columbia City, Ind., Aug. 27, 1877.
- DOUGLAS, Norman (novelist); Scotland, Dec. 8, 1868.
- DU MAURIER, Daphne (novelist); London, Eng., May 13, 1907.
- EASTMAN, Max (social writer); Canandaigua, N. Y., Jan. 4, 1883.
- EDMAN, Irwin (philosopher); New York City, Nov. 28, 1896.
- EDMONDS, Walter (novelist); Boonville, N. Y., July 15, 1903.
- ELIOT, Thomas S. (poet, essayist); St. Louis, Mo., Sept. 26, 1888.
- ERSKINE, John (novelist); New York City, Oct. 5, 1879.
- FADIMAN, Clifton (critic); New York City, May 15, 1904.
- FARRELL, James T. (novelist); Chicago, Ill., Feb. 27, 1904.
- FAST, Howard (novelist); New York City, Nov. 11, 1914.
- FAULKNER, William (novelist); New Albany, Miss., Sept. 25, 1897.
- FERBER, Edna (novelist); Kalamazoo, Mich., Aug. 15, 1887.
- FEUCHTWANGER, Lion (novelist); Munich, Ger., July 7, 1884.
- FISHER, Dorothy Canfield (novelist); Lawrence, Kans., Feb. 17, 1879.
- FISHER, Vardis (novelist); Annis, Idaho, Mar. 31, 1895.
- FORESTER, Cecil S. (novelist); Cairo, Egypt, Aug. 27, 1899.
- FORSTER, Edward M. (novelist); England, 1879.
- FRANK, Waldo (novelist); Long Branch, N. J., Aug. 25, 1889.
- FRANKEN, Rose (playwright, novelist); Gainesville, Tex., 1898.
- FREEMAN, Douglas S. (historian); Lynchburg, Va., May 16, 1886.
- FROST, Robert (poet); San Francisco, Calif., Mar. 26, 1875.
- FRY, Christopher (playwright); Briston, Eng., Dec. 18, 1907.
- GALLICO, Paul (short story writer); New York City, July 26, 1897.
- GANNETT, Lewis (critic); Rochester, N. Y., Oct. 3, 1891.
- GARDNER, Erle Stanley (novelist); Malden, Mass., July 17, 1889.
- GIDE, André (novelist, essayist); Paris, Fr., Nov. 21, 1869.
- GOLDING, Louis (novelist); Manchester, Eng., Nov. 19, 1895.
- GRAVES, Robert (poet, novelist); London, Eng., July 26, 1895.
- GREEN, Julian (novelist); Paris, Fr., Sept. 6, 1900.
- GREEN, Paul (playwright); Lillington, N. C., Mar. 17, 1894.
- GREGORY, Horace (poet); Milwaukee, Wis., Apr. 10, 1898.
- GUNTHER, John (correspondent); Chicago, Ill., Aug. 30, 1901.
- GUTHRIE, Alfred B., Jr. (novelist); Bedford, Ind., Jan. 13, 1901.
- HACKETT, Francis (critic, novelist); Killkenny, Ire., Jan. 21, 1883.
- HAMMETT, Dashiell (novelist); St. Marys Co., Md., May 27, 1894.
- HAMSUN, Knut (novelist); Lom, Nor., Aug. 4, 1859.
- HART, Moss (playwright); New York City, Oct. 24, 1904.
- HAYES, Alfred (novelist); London, 1911.
- HECHT, Ben (novelist, playwright); New York City, Feb. 28, 1894.
- HELLMAN, Lillian (playwright); New Orleans, La., June 20, 1905.
- HEMINGWAY, Ernest (novelist); Oak Park, Ill., July 21, 1898.
- HERSEY, John R. (novelist); Tientsin, China, June 17, 1914.
- HESSE, Hermann (novelist); Calw, Ger., July 2, 1877.
- HILLYER, Robert S. (poet); East Orange, N. J., June 3, 1895.
- HILTON, James (novelist); Leigh, Eng., Sept. 9, 1900.
- HOBSON, Laura Z. (Laura K. Zametkin) (novelist); New York City.
- HOOK, Sidney (philosopher); New York City, Dec. 20, 1902.
- HOUSMAN, Laurence (playwright, novelist); Bromsgrove, Eng., July 18, 1865.

- HUGHES, Langston (poet); Joplin, Mo., Feb. 1, 1902.
- HURST, Fannie (novelist); Hamilton, Ohio, Oct. 18, 1889.
- HUXLEY, Aldous (novelist, essayist); Godalming, Eng., July 26, 1894.
- ISHERWOOD, Christopher (novelist); Disley, Cheshire, Eng., Aug. 26, 1904.
- JACKSON, Charles (novelist); Summit, N. J., Apr. 6, 1903.
- JAMESON, Margaret Storm (novelist); Whitby, Eng., 1897.
- JEFFERS, Robinson (poet); Pittsburgh, Pa., Jan. 10, 1887.
- JENSEN, Johannes V. (novelist, poet); Farsø, N. Jutland, Jan. 20, 1873.
- JOHNSON, Josephine Winslow (novelist); Kirkwood, Mo., June 20, 1910.
- JOSEPHSON, Matthew (critic, biographer); Brooklyn, N. Y., Feb. 15, 1899.
- KANIN, Garson (playwright, director); Rochester, N. Y., Nov. 24, 1912.
- KANTOR, MacKinlay (novelist); Webster City, Iowa, Feb. 4, 1904.
- KAUFMAN, George S. (playwright); Pittsburgh, Pa., Nov. 16, 1889.
- KAZIN, Alfred (critic); Brooklyn, N. Y., June 5, 1915.
- KELLAND, Clarence Budington (novelist); Kalamazoo, Mich., July 11, 1881.
- KENNEDY, Margaret (novelist); London, Eng., 1896.
- KEYES, Frances Parkinson (novelist); Univ. of Va., July 21, 1885.
- KIERAN, John (editor); New York City, Aug. 2, 1892.
- KINGSLEY, Sidney (Sidney Kirschner) (playwright); N. Y. C., Oct. 18, 1906.
- KOESTLER, Arthur (novelist); Budapest, Hung., Sept. 5, 1905.
- KOMROFF, Manuel (novelist); New York City, Sept. 7, 1890.
- KREYMBORG, Alfred (poet); New York City, Dec. 10, 1883.
- LA FARGE, Christopher (poet, novelist); New York City, Dec. 10, 1897.
- LA FARGE, Oliver (novelist); New York City, Dec. 19, 1901.
- LAWSON, John Howard (playwright); New York City, Sept. 25, 1895.
- LEAF, Munro (children's writer); Hamilton, Md., Dec. 4, 1905.
- LEHMANN, Rosamond (novelist); London, Eng., 1903.
- LERNER, Max (social writer); Minsk, Rus., Dec. 20, 1902.
- LEWIS, Sinclair (novelist); Sauk Center, Minn., Feb. 7, 1885.
- LEWISOHN, Ludwig (novelist, critic); Berlin, Ger., May 30, 1883.
- LIN Yutang (philosopher); Changchow, China, Oct. 10, 1895.
- LINDSAY, Howard (playwright); Waterford, N. Y., Mar. 29, 1889.
- LLEWELLYN, Richard (novelist); St. David's, Wales.
- LOWELL, Robert (Traill Spence, Jr.) (poet); Boston, Mass., Mar. 1, 1917.
- MACARTHUR, Charles (playwright); Scranton, Pa., Nov. 5, 1895.
- MACLEISH, Archibald (poet); Glencoe, Ill., May 7, 1892.
- MAILER, Norman (novelist); Long Branch, N. J., Jan. 31, 1923.
- MALRAUX, André (novelist); Paris, Fr., Nov. 3, 1895.
- MANN, Thomas (novelist); Lübeck, Ger., June 6, 1875.
- MARITAIN, Jacques (philosopher); Paris, Fr., Nov. 18, 1882.
- MARQUAND, John P. (novelist); Wilmington, Del., Nov. 10, 1893.
- MARTIN DU GARD, Roger (novelist); Neuilly-sur-Seine, Fr., 1881.
- MASEFIELD, John (poet); Ledbury, Eng., June 1, 1878.
- MASON, F. van Wyck (novelist); Boston, Mass., Nov. 11, 1901.
- MAUGHAM, William Somerset (novelist); Paris, Fr., Jan. 25, 1874.
- MAUROIS, André (Émile Herzog) (novelist); Elbeuf, Fr., July 26, 1885.
- MENCKEN, Henry L. (critic); Baltimore, Md., Sept. 12, 1880.
- MERTON, Thomas (poet, religious writer); Prades, Fr., Jan. 31, 1915.
- MICHENER, James A. (novelist); New York City, Feb. 3, 1907.
- MILLER, Arthur (playwright); N. Y. C., 1915.
- MILNE, Alan A. (novelist, playwright); London, Eng., Jan. 18, 1882.
- MISTRAL, Gabriela (Lucila Godoy Alcayaga) (poet); Vicuña, Chile, Apr. 7, 1889.
- MOLNAR, Ferenc (playwright); Budapest, Hung., Jan. 12, 1878.
- MORGAN, Charles (novelist); Kent, Eng., Jan. 22, 1894.
- MORLEY, Christopher (novelist); Haverford, Pa., May 5, 1890.
- MOTLEY, Willard (novelist); Chicago, Ill., July 14, 1912.
- NASH, Ogden (poet, humorist); Rye, N. Y., Aug. 19, 1902.
- NATHAN, Robert (novelist); New York City, Jan. 2, 1894.
- NEVINS, Allan (historian); Camp Point, Ill., May 20, 1890.
- NEXÖ, Martin Andersen (novelist); Copenhagen, Den., June 26, 1869.
- NORRIS, Kathleen (novelist); San Francisco, Calif., July 16, 1880.

- NOYES, Alfred (poet); Wolverhampton, Eng., Sept. 16, 1880.
- O'CASEY, Sean (playwright); Dublin, Ire., 1881.
- ODETS, Clifford (playwright); Philadelphia, Pa., July 18, 1906.
- O'FAOLAIN, Seán (story writer); Cork, Ire., Feb. 22, 1900.
- O'FLAHERTY, Liam (novelist); Aran Is., Ire., 1897.
- O'HARA, John (story writer, novelist); Pottsville, Pa., Jan. 31, 1905.
- O'NEILL, Eugene (playwright); New York City, Oct. 16, 1888.
- ORTEGA y GASSET, José (social writer); Madrid, Sp., May 9, 1883.
- OURSLEER, Fulton (novelist); Baltimore, Md., Jan. 22, 1893.
- PARKER, Dorothy (poet, story writer); West End, N. J., Aug. 22, 1893.
- PAUL, Elliot (novelist); Malden, Mass., Feb. 13, 1891.
- PEATIE, Donald Culross (nature writer); Chicago, Ill., June 21, 1898.
- PERELMAN, Sidney J. (humorist, playwright); Brooklyn, N. Y., Feb. 1, 1904.
- PORTER, Katherine Anne (story writer); Indian Creek, Tex., May 15, 1894.
- POUND, Ezra (poet); Hailey, Idaho, Oct. 30, 1885.
- PRATT, Fletcher (historian); Buffalo, N. Y., Apr. 25, 1897.
- PRIESTLEY, John B. (novelist, playwright); Bradford, Eng., Sept. 13, 1894.
- PROKOSCH, Frederic (novelist); Madison, Wis., May 17, 1908.
- RAINE, William MacLeod (novelist); London, Eng., June 22, 1871.
- RANSOM, John Crowe (poet); Pulaski, Tenn., Apr. 30, 1888.
- RAWLINGS, Marjorie Kinnan (novelist); Washington, D. C., Aug. 8, 1896.
- REMARQUE, Erich Maria (novelist); Osnabrück, Ger., June 22, 1898.
- RICE, Elmer (Elmer Reizenstein) (playwright); N. Y. C., Sept. 28, 1892.
- RICHARDS, Ivor Armstrong (critic); Sandbach, Eng., Feb. 26, 1893.
- RICHTER, Conrad (novelist); Pine Grove, Pa., Oct. 13, 1890.
- ROBERTS, Kenneth (novelist); Kennebunk, Maine, Dec. 8, 1885.
- ROBINSON, Henry Morton (novelist); Boston, Mass., Sept. 7, 1898.
- ROMAINS, Jules (Louis Farigoule) (novelist); Saint-Julien Chapeuill, Fr., Aug. 26, 1885.
- ROSS, Nancy Wilson (novelist); Olympia, Wash.
- RUSSELL, Bertrand (philosopher); Trelleck, Eng., May 18, 1872.
- SACKVILLE-WEST, Victoria (poet, novelist); Sevenoaks, Eng., Mar. 9, 1892.
- SANDBURG, Carl (poet, biographer); Galesburg, Ill., Jan. 6, 1878.
- SANTAYANA, George (philosopher, poet); Madrid, Sp., Dec. 16, 1863.
- SAROYAN, William (story writer, playwright); Fresno, Calif., Aug. 31, 1908.
- SARTRE, Jean-Paul (philosopher); Paris, Fr., June 21, 1905.
- SASSOON, Siegfried (poet); Matfield, Eng., Sept. 8, 1886.
- SCHLESINGER, Arthur M., Jr. (historian); Columbus, Ohio, Oct. 15, 1917.
- SCHLESINGER, Arthur M., Sr. (historian); Xenia, Ohio, Feb. 27, 1888.
- SHAPIRO, Karl (poet); Baltimore, Md., Nov. 10, 1913.
- SHAW, Irwin (playwright, novelist); New York City, Feb. 27, 1913.
- SHEEAN, Vincent (novelist, essayist); Pana, Ill., Dec. 5, 1899.
- SHELLABARGER, Samuel (novelist); Washington, D. C., May 18, 1888.
- SHERRIFF, Robert (playwright); Kingston-on-Thames, Eng., June 6, 1896.
- SHERWOOD, Robert E. (playwright); New Rochelle, N. Y., Apr. 4, 1896.
- SHOLOKHOV, Mikhail (novelist); Veshenskaya, Rus., 1905.
- SHULMAN, Max (humorist); St. Paul, Minn., Mar. 14, 1919.
- SILLANPÄÄ, Frans Eemil (novelist); Hämeenkyrö, Fin., Sept. 16, 1888.
- SILONE, Ignazio (Secondo Tranquilli) (novelist); Pescina dei Marsi, It., May 1, 1900.
- SIMENON, Georges (Georges Sim) (novelist); Liéges, Belg., Feb. 13, 1903.
- SINCLAIR, Upton (novelist); Baltimore, Md., Sept. 20, 1878.
- SITWELL, Edith (poet); Scarborough, Eng., 1887.
- SITWELL, Sir Osbert (poet, satirist); London, Eng., Dec. 6, 1892.
- SITWELL, Sacheverell (poet, art critic); Scarborough, Eng., 1897.
- SMITH, Betty (novelist); Brooklyn, N. Y., Dec. 15, 1904.
- SMITH, Lillian (novelist); Jasper, Fla., 1897.
- SPENDER, Stephen (poet); nr. London, Eng., Feb. 28, 1909.
- STALLINGS, Laurence (novelist, playwright); Macon, Ga., Nov. 25, 1894.
- STEINBECK, John (novelist); Salinas, Calif., Feb. 27, 1902.
- STEPHENS, James (novelist, poet); Dublin, Ire., 1882.
- STONE, Irving (biographer); San Francisco, Calif., July 14, 1903.

- STONG, Philip (novelist); Keosauqua, Iowa, Jan. 27, 1899.
- STREET, James (novelist); Lumberton, Miss., Oct. 15, 1903.
- STREETER, Edward (novelist); New York City, Aug. 1, 1891.
- STRIBLING, Thomas S. (novelist); Clifton, Tenn., Mar. 4, 1881.
- STRUTHER, Jan (Joyce Anstruther) (novelist); London, Eng., June 8, 1901.
- STUART, Jesse (poet, novelist); W-Hollow, Ky., Aug. 8, 1907.
- SUCKOW, Ruth (novelist); Hawarden, Iowa, Aug. 6, 1892.
- SULLIVAN, Mark (political writer); Avondale, Pa., Sept. 10, 1874.
- TATE, Allen (poet); Winchester, Ky., Nov. 19, 1899.
- THOMAS, Dylan (poet); Carmarthenshire, Wales, 1914.
- THURBER, James (humorist); Columbus, Ohio, Dec. 8, 1894.
- TOYNBEE, Arnold J. (historian); London, Eng., Apr. 14, 1889.
- UNTERMEYER, Louis (poet, anthologist); New York City, Oct. 1, 1885.
- VALTIN, Jan (Richard J. H. Krebs) (novelist); Darmstadt, Ger., Dec. 17, 1905.
- VAN DOREN, Mark (poet, critic); Hope, Ill., June 13, 1894.
- VAN DRUTEN, John (playwright); London, Eng., June 1, 1901.
- VIDAL, Gore (novelist); West Point, N. Y., Oct. 3, 1925.
- WAKEMAN, Frederic (novelist); Scranton, Kans., Dec. 26, 1909.
- WARNER, Sylvia Townsend (novelist, poet); Harrow-on-the-Hill, Eng., 1893.
- WARREN, Robert Penn (novelist); Guthrie, Ky., Apr. 24, 1905.
- WAUGH, Alexander (novelist); London, Eng., July 8, 1898.
- WAUGH, Evelyn (novelist); London, Eng., 1903.
- WEIDMAN, Jerome (novelist); New York City, Apr. 4, 1913.
- WESCOTT, Glenway (novelist); Kewaskum, Wis., Apr. 11, 1901.
- WEST, Rebecca (Cicily Fairfield) (novelist); Edinburgh, Scot., Dec. 25, 1892.
- WHITE, Elwyn B. (poet, humorist); Mt. Vernon, N. Y., July 11, 1899.
- WILDER, Thornton (novelist, playwright); Madison, Wis., Apr. 17, 1897.
- WILLIAMS, Ben Ames (novelist); Macon, Miss., Mar. 7, 1889.
- WILLIAMS, Emlyn (playwright); Mostyn, Wales, Nov. 26, 1905.
- WILLIAMS, Tennessee (Thomas L.) (playwright); Columbus, Miss., Mar. 26, 1914.
- WILLIAMS, Wm. Carlos (novelist, poet); Rutherford, N. J., Sept. 17, 1883.
- WILSON, Edmund (critic, novelist); Red Bank, N. J., May 8, 1895.
- WILSON, Margaret (novelist); Traer, Iowa, Jan. 16, 1882.
- WINSOR, Kathleen (novelist); Olivia, Minn., Oct. 16, 1919.
- WINWAR, Frances (Francesca Vinciguerra) (novelist); Taormina, Sicily, May 3, 1900.
- WRIGHT, Richard (novelist); near Natchez, Miss., Sept. 4, 1908.
- WYLIE, Philip (novelist); Beverly, Mass., May 12, 1902.
- YERBY, Frank (novelist); Augusta, Ga., Sept. 5, 1916.
- ZWEIG, Arnold (novelist); Grosz-Glogau, Silesia, Nov. 10, 1887.

Science

- ABBOT, Charles G. (astrophysicist); Wilton, N. H., May 31, 1872.
- ALEXANDERSON, Ernst F. W. (engineer, inventor); Uppsala, Swed., Jan. 25, 1878.
- ANDERSON, Carl D. (physicist); New York City, Sept. 3, 1905.
- ANDREWS, Roy Chapman (zoologist, explorer); Beloit, Wis., Jan. 26, 1884.
- APPLETON, Sir Edward V. (physicist); England, Sept. 6, 1892.
- ARMSTRONG, Edwin H. (engineer); New York City, Dec. 18, 1890.
- BAADE, Walter (astronomer); Schroetingshausen, Ger., Mar. 24, 1893.
- BEEBE, William (zoologist); Brooklyn, N. Y., July 29, 1877.
- BLACKETT, Patrick M. S. (physicist); Nov. 18, 1897.
- BLODGETT, Katharine B. (physicist); Schenectady, N. Y., Jan. 10, 1898.
- BOHR, Niels (physicist); Copenhagen, Den., Oct. 7, 1885.
- BRAGG, Sir William L. (physicist); Adelaide, Austr., Mar. 31, 1890.
- BRIDGMAN, Percy W. (physicist); Cambridge, Mass., Apr. 21, 1882.
- BUSH, Vannevar (engineer); Everett, Mass., Mar. 11, 1890.
- BYRD, Richard E. (explorer); Winchester, Va., Oct. 25, 1888.
- CHADWICK, Sir James (physicist); England, Oct. 29, 1891.
- COLE, Rufus (physician); Rowsburg, Ohio, Apr. 30, 1872.
- COMPTON, Arthur H. (physicist); Wooster, Ohio, Sept. 10, 1892.

- COMPTON, Karl T. (physicist); Wooster, Ohio, Sept. 14, 1887.
- CONDON, Edward U. (physicist); Alameda, N. Mex., Mar. 2, 1902.
- COOLIDGE, William D. (physical chemist); Hudson, Mass., Oct. 23, 1873.
- CORI, Carl F. (biochemist); Prague, Czech., Dec. 15, 1896.
- CORI, Gerty T. (biochemist); Prague, Czech., Aug. 15, 1896.
- DAM, Henrik (biochemist); Copenhagen, Den., Feb. 21, 1895.
- DAVISSON, Clinton J. (physicist); Bloomington, Ill., Oct. 22, 1881.
- DE BROGLIE, Louis Victor (physicist); Dieppe, Fr., Aug. 15, 1892.
- DE KRUIF, Paul (science writer); Zeeland, Mich., Mar. 2, 1890.
- DIRAC, Paul A. M. (physicist); Bristol, Eng., Aug. 8, 1902.
- DOISY, Edward A. (biochemist); Hume, Ill., Nov. 13, 1893.
- DUNNING, John R. (physicist); Shelby, Nebr., Sept. 24, 1907.
- EINSTEIN, Albert (physicist); Ulm, Ger., Mar. 14, 1879.
- ELLSWORTH, Lincoln (explorer, engineer); Chicago, Ill., May 12, 1880.
- ERLANGER, Joseph (physiologist); San Francisco, Calif., Jan. 5, 1874.
- EVANS, Herbert M. (anatomist); Modesto, Calif., Sept. 23, 1882.
- FERMI, Enrico (physicist); Rome, It., Sept. 29, 1901.
- FLEMING, Sir Alexander (bacteriologist); Lochfield, Eng., 1881.
- HAHN, Otto (physical chemist); Frankfurt on Main, Ger., Mar., 8, 1879.
- HALDANE, John B. S. (geneticist); England, Nov. 5, 1892.
- HEISENBERG, Werner (physicist); Germany, Dec. 5, 1901.
- HEISER, Victor G. (hygienist); Johnstown, Pa., Feb. 5, 1873.
- HOGBEN, Lancelot (biologist); Southsea, Eng., Dec. 9, 1895.
- HOOTON, Earnest A. (anthropologist); Clemons, Wis., Nov. 20, 1887.
- HOUSSAY, Bernardo A. (physiologist); Buenos Aires, Arg., Apr. 10, 1887.
- HUBBARD, Father Bernard R. (geologist, explorer); San Francisco, Calif., Nov. 24, 1888.
- HUBBLE, Edwin P. (astronomer); Marshfield, Mo., Nov. 20, 1889.
- HUNTINGTON, Ellsworth (geographer); Galesburg, Ill., Sept. 16, 1876.
- HUXLEY, Julian S. (biologist); England, June 22, 1887.
- JOLIOT-CURIE, Frédéric (physicist); Paris, Fr., Mar. 19, 1900.
- JOLIOT-CURIE, Irène (physicist); France, Sept. 12, 1897.
- JUNG, Carl G. (psychiatrist); Basel, Switz., July 26, 1876.
- KAPITZA, Peter L. (physicist); Kronstadt, Rus., July 8, 1894.
- KENNY, "Sister" Elizabeth (nurse); Warriald, Austr., Sept. 20, 1886.
- KETTERING, Charles F. (engineer); b. nr. Loudonville, Ohio, Aug. 29, 1876.
- KINSEY, Alfred C. (zoologist, sexologist); Hoboken, N. J., June 23, 1894.
- LANGMUIR, Irving (chemist); Brooklyn, N. Y., Jan. 31, 1881.
- LAWRENCE, Ernest O. (physicist); Canton, S. Dak., Aug. 8, 1901.
- LYNCH, Rev. J. Joseph (seismologist); London, Eng., Dec. 6, 1894.
- MACNIDER, William (pharmacologist); Chapel Hill, N. C., June 25, 1881.
- MAYO, Charles W. (surgeon); Rochester, Minn., July 28, 1898.
- MEITNER, Lise (physicist); Vienna, Aus., Nov. 7, 1878.
- MENNINGER, William C. (psychiatrist); Topeka, Kans., Oct. 15, 1899.
- MILLIKAN, Robert A. (physicist); Morrison, Ill., Mar. 22, 1868.
- MOULTON, Forest R. (astronomer); b. nr. Le Roy, Mich., Apr. 29, 1872.
- MUELLER, Paul (chemist); Olten, Switz., Jan. 12, 1899.
- MURPHY, William P. (physician); Stoughton, Wis., Feb. 6, 1892.
- NORDEN, Carl L. (inventor); Semarang, Java, Apr. 23, 1880.
- OPPENHEIMER, J. Robert (physicist); New York City, Apr. 22, 1904.
- PAINTER, Theophilus S. (zoologist); Salem, Va., Aug. 22, 1889.
- PARRAN, Thomas (surgeon); St. Leonard, Md., Sept. 28, 1892.
- PICCARD, Auguste (physicist); Basel, Switz., Jan. 28, 1884.
- PICCARD, Jean Félix (aero. eng.); Basel, Switz., Jan. 28, 1884.
- RABI, Isidor I. (physicist); Raymanou, Aus., July 29, 1898.
- ROBINSON, Sir Robert (chemist); England, Sept. 13, 1886.
- RUSSELL, Henry N. (astronomer); Oyster Bay, N. Y., Oct. 25, 1877.
- SABIN, Florence R. (anatomist); Central City, Colo., Nov. 9, 1871.
- SCHWEITZER, Albert (physician); Kayersburg, Alsace, Jan. 14, 1875.
- SEABORG, Glenn T. (nuclear chemist); Ishpeming, Mich., Apr. 19, 1912.
- SHAPLEY, Harlow (astronomer); Nashville, Mo., Nov. 2, 1885.

SIEGBAHN, Karl M. G. (physicist); Örebro, Swed., Dec. 3, 1886.
 SIKORSKY, Igor I. (aircraft designer); Kiev, Rus., May 25, 1889.
 SMYTH, Henry DeWolf (physicist); Clinton, N. Y., May 1, 1898.
 STEENBOCK, Harry (biochemist); Charles-town, Wis., Aug. 16, 1886.
 STEFANSSON, Vilhjalmur (explorer); Arnes, Can., Nov. 3, 1879.

TISELIUS, Arne (biochemist); Stockholm, Swed., Aug. 10, 1902.
 UREY, Harold C. (chemist); Walkerton, Ind., Apr. 29, 1893.
 WAKSMAN, Selman A. (microbiologist); Priluki, Rus., July 2, 1888.
 WHIPPLE, George H. (pathologist); Ash-land, N. H., Aug. 28, 1878.
 ZWORYKIN, Vladimir K. (physicist); Mourom, Rus., July 30, 1889.

Public Affairs

ABDULLAH IBN HUSSEIN (King, Jord.); Mecca, Hejaz, 1882.
 ACHESON, Dean (U. S. Sec. State); Mid-dletown, Conn., Apr. 11, 1893.
 ADENAUER, Konrad (Chanc., W. Ger.); Cologne, Ger., Jan. 5, 1876.
 ALEMÁN, Miguel (Pres., Mex.); Sayula, Mex., Sept. 29, 1903.
 ATTLEE, Clement R. (Pr. Min., Brit.); Lon-don, Eng., Jan. 3, 1883.
 AURIOL, Vincent (Pres., Fr.); Revel, Fr., Aug. 27, 1884.
 AUSTIN, Warren R. (U. S. Perm. Rep. to U. N.); Highgate, Vt., Nov. 12, 1877.
 BARKLEY, Alben W. (Vice Pres., U. S.); Graves Co., Ky., Nov. 24, 1877.
 BARUCH, Bernard (financier); Camden, S. C., Aug. 19, 1870.
 BAUDOUIN (Prince Royal, Belg.); Palace of Laeken, Belg., Sept. 7, 1930.
 BEN-GURION, David (Prem., Israel); Plońsk, Pol., Oct. 16, 1886.
 BEVIN, Ernest (For. Sec., Brit.); Winsford, Eng., Mar. 9, 1881.
 BIERUT, Boleslaw (Boleslaw Krasnodebski) (Pres., Pol.); Lublin, Pol., Apr. 19, 1892.
 BJÖRNSSON, Sveinn (Pres., Ice.); Iceland, Feb. 27, 1881.
 BLACK, Hugo L. (Just., U. S. Sup. Ct.); Harlan, Ala., Feb. 27, 1886.
 BOYLE, William M., Jr. (Chmn., Dem. Natl. Comm.); Leavenworth, Kans., Feb. 3, 1902.
 BRADLEY, Omar N. (Chmn., Jnt. Chfs. of Staff, U. S.); Clark, Mo., Feb. 12, 1893.
 BURTON, Harold H. (Just., U. S. Sup. Ct.); Jamaica Plain, Mass., June 22, 1888.
 CHAPMAN, Oscar L. (U. S. Sec. Int.); Omega, Va., Oct. 22, 1896.
 CHIANG Kai-shek (Pres., Nationalist China); Feng-hwa, China, Oct. 31, 1887.
 CHOU En-lai (For. Min., Communist China); Hualyin, China, 1898.
 CHURCHILL, Winston (former Pr. Min., Brit.); Oxfordshire, Eng., Nov. 30, 1874.
 CLARK, Thomas C. (Just., U. S. Sup. Ct.); Dallas, Tex., Sept. 23, 1899.

CONNALLY, Thomas T. (U. S. Sen., Tex.); McLennan Co., Tex., Aug. 19, 1877.
 COSTELLO, John A. (Pr. Min., Ire.); near Dublin, Ire., June 20, 1891.
 DALTON, Hugh (Min. of Town, Country Planning, Brit.); Neath, Wales, Aug. 26, 1887.
 DE GAULLE, Charles (wartime ldr., Fr.); Lille, Fr., Nov. 22, 1890.
 DEWEY, Thomas E. (Gov., N. Y.); Owosso, Mich., Mar. 24, 1902.
 DOUGLAS, William O. (Just., U. S. Sup. Ct.); Maine, Minn., Oct. 16, 1898.
 DULLES, John Foster (Consultant to Sec. of State, U. S.); Washington, D. C., Feb. 25, 1888.
 DUTRA, Eurico G. (Pres., Braz.); Cuiabá, Braz., May 18, 1885.
 EINAUDI, Luigi (Pres., It.); Carrù, It., Mar. 24, 1874.
 EISENHOWER, Dwight D. (Pres., Colum. U.); Denison, Tex., Oct. 14, 1890.
 FAROUK I (King, Egy.); Cairo, Egy., Feb. 11, 1920.
 FRANCO, Francisco (Ch. of State, Sp.); El Ferrol, Sp., Dec. 4, 1892.
 FRANKFURTER, Felix (Just., U. S. Sup. Ct.); Vienna, Aus., Nov. 15, 1882.
 FRANKS, Sir Oliver S. (Brit. Amb. to U. S.); England, Feb. 16, 1905.
 FREDERICK IX (King, Den.); near Copen-hagen, Den., Mar. 11, 1899.
 GABRIELSON, Guy G. (Chmn., Rep. Natl. Comm.); Sioux Rapids, Iowa, May 22, 1891.
 GASPERI, Alcide de (Prem., It.); Pieve Tesino, Aus.-Hung., Apr. 3, 1881.
 GEORGE VI (King, Eng.); Sandringham, Eng., Dec. 14, 1895.
 GIFFORD, Walter S. (U. S. Amb. to Brit.); Salem, Mass., Jan. 10, 1885.
 GOTTFELD, Klement (Pres., Czech.); Dědice, Moravia, Nov. 23, 1896.
 GREEN, William (Pres., AFL, U. S.); Coshocton, Ohio, Mar. 3, 1873.
 GROMYKO, Andrei A. (Dep. For. Min., U.S.S.R.); Starye Gromyki, Rus., July 5, 1909.

- GROTEWOHL, Otto (Prem., E. Ger.); Brunswick, Ger., Mar. 11, 1894.
- GUSTAVUS VI (King, Swed.); Stockholm, Swed., Nov. 11, 1882.
- HAAKON VII (King, Nor.); Denmark, Aug. 3, 1872.
- HAILE SELASSIE I (Emp., Eth.); Ethiopia, July 17, 1891.
- HARRIMAN, W. Averell (Spec. Asst. to U. S. Pres.); Nov. 15, 1891.
- HERSHEY, Maj. Gen. Lewis B. (Sel. Serv. Dir., U. S.); Steuben Co., Ind., Sept. 12, 1893.
- HEUSS, Theodor (Pres., W. Ger.); Brackenheim, Ger., Jan. 31, 1884.
- HIROHITO (Emp., Jap.); Japan, Apr. 29, 1901.
- HOOVER, Herbert C. (former Pres., U. S.); West Branch, Iowa, Aug. 10, 1874.
- HOOVER, J. Edgar (Dir., FBI, U. S.); Washington, D. C., Jan. 1, 1895.
- IBN SA'UD (King, Saudi Arabia); Riyadh, Arab., c.1880.
- JACKSON, Robert H. (Just., U. S. Sup. Ct.); Spring Creek, Pa., Feb. 13, 1892.
- JEBB, Sir Gladwyn (Brit. Perm. Rep. to U. N.); England, Apr. 25, 1900.
- JESSUP, Philip C. (Amb.-at-large, U. S.); New York City, Jan. 5, 1897.
- JULIANA (Queen, Neth.); The Hague, Neth., Apr. 30, 1909.
- KHAN, Liaquat Ali (Pr. Min., Pakistan); Karnal, E. Punjab., Oct. 1, 1895.
- KIRK, Adm. Alan G. (U. S. Amb. to U.S.S.R.); Philadelphia, Pa., Oct. 30, 1888.
- LEOPOLD III (King, Belg.); Nov. 3, 1901.
- LEWIS, John L. (Pres., UMW, U. S.); Lucas, Iowa, Feb. 12, 1880.
- LIE, Trygve (Sec. Gen., U. N.); Oslo, Nor., July 16, 1896.
- LILIENTHAL, David E. (Former Chmn., Atomic Energy Comm.); Morton, Ill., July 8, 1899.
- MacARTHUR, Gen. Douglas (Comm., U. N. Forces in Korea); Little Rock barracks, Ark., Jan. 26, 1880.
- McGRATH, J. Howard (U. S. Atty. Gen.); Woonsocket, R. I., Nov. 28, 1903.
- MALIK, Yakov A. (Sov. Perm. Rep. to U. N.); Ukraine, 1906.
- MAO Tse-tung (Pres., Communist China); Shao Shan, China, 1893.
- MARSHALL, George C. (U. S. Sec. Def.); Unlontown, Pa., Dec. 31, 1880.
- MARTIN, Joseph W., Jr. (Min. Ldr., House, U. S.); North Attleboro, Mass., Nov. 3, 1884.
- MENZIES, Robert G. (Pr. Min., Austr.); Jeparit, Austr., Dec. 20, 1894.
- MINTON, Sherman (Just., U. S. Sup. Ct.); Georgetown, Ind., Oct. 20, 1890.
- MOLOTOV, Vyacheslav M. (V. M. Skryabin) (Dep. Prem., U.S.S.R.); Kukarka, Rus., Mar. 9, 1890.
- MORRISON, Herbert S. (Lord Pres. of Counc., Brit.); London, Eng., Jan. 3, 1888.
- MURRAY, Philip (Pres., CIO, U. S.); Bantyre, Scot., May 25, 1886.
- NAZIMUDDIN, Khwaja (Gov. Gen., Pakistan); Dacca, Bengal, July 19, 1894.
- NEHRU, Jawaharlal (Pr. Min., India); Allahabad, India, Nov. 14, 1889.
- O'KELLY, Séan (Pres., Ire.); Dublin, Ire., Aug. 25, 1882.
- PAASIKIVI, Juho K. (Pres., Fin.); Tampere, Fin., Nov. 27, 1870.
- PANYUSHKIN, Alexander S. (Sov. Amb. to U. S.); Kulbyshev, Rus., June, 1905.
- PAUKER, Ana (Ana Rabinsohn) (For. Min., Rum.); Codaesti, Moldavia, 1893.
- PAUL I (King, Gr.); Athens, Gr., Dec. 14, 1901.
- PEARSON, Lester B. (Ext. Aff. Sec., Can.); Toronto, Can., Apr. 23, 1897.
- PERÓN, Juan D. (Pres., Arg.); near Lobos, Arg., Oct. 8, 1895.
- PIECK, Wilhelm (Pres., E. Ger.); Guben, Ger., Jan. 3, 1876.
- PIUS XII (Eugenio Pacelli) (Pope); Rome, It., Mar. 2, 1876.
- QUIRINO, Elpidio (Pres., Phil.); Vigan, Luzon, Phil., Nov. 16, 1890.
- RAYBURN, Sam (Spkr., House, U. S.); Roane Co., Tenn., Jan. 6, 1882.
- REED, Stanley F. (Just., U. S. Sup. Ct.); Mason Co., Ky., Dec. 31, 1884.
- RENNER, Karl (Pres., Aus.); Dolne-Dunajovice, Moravia, Dec. 14, 1870.
- REUTHER, Walter P. (Pres., UAW, U. S.); Wheeling, W. Va., Sept. 1, 1907.
- RHEE, Syngman (Pres., South Kor.); Whanghai Prov., Kor., Apr. 26, 1875.
- ROOSEVELT, Eleanor (U. N. Del., U. S.); New York City, Oct. 11, 1884.
- ST. LAURENT, Louis Stephen (Pr. Min., Can.); Compton, Que., Can., Feb. 1, 1882.
- SALAZAR, António de Oliveira (Prem., Port.); Santa Comba, Port., 1889.
- SCHUMAN, Robert (For. Min., Fr.); Luxemburg, Luxem., June 29, 1886.
- SCHVERNIK, Nikolai M. (Chmn., Presidium of Sup. Counc., U.S.S.R.); Russia, 1888.
- SFORZA, Count Carlo (For. Min., It.); Montignoso de Lunigiana, It., Sept. 24, 1873.
- SHARETT, Moshe (Moshe Shertok) (For. Min., Israel); Kherson, Ukraine, 1894.
- SHINWELL, Emanuel (Min. of Defense, Brit.); London, Eng., Oct. 18, 1884.
- SNYDER, John W. (U. S. Sec. of Treas.); Jonesboro, Ark., June 21, 1896.

SPAACK, Paul-Henri (Pres., Counc. of Eur.); Brussels, Belg., Jan. 25, 1899.

STALIN, Joseph V. (Iosif V. Dzhugashvili) (Prem., U.S.S.R.); Gori, Georgia, Transcaucasia, Dec. 21, 1879.

STASSEN, Harold E. (Pres., U. of Pa.); West St. Paul, Minn., Apr. 13, 1907.

TAFT, Robert A. (U. S. Sen., Ohio); Cincinnati, Ohio, Sept. 8, 1889.

THOMAS, Norman M. (Socialist ldr., U. S.); Marion, Ohio, Nov. 20, 1884.

THOREZ, Maurice (Communist ldr., Fr.); Noyelles-Godault, Fr., Apr. 23, 1900.

TITO (Josip Brozovich or Broz) (Prem., Yugos.); Kumrovec, Croatia, May 25, 1892.

TOGLIATTI, Palmiro (Communist ldr., It.); Genoa, It., Mar. 26, 1893.

TRUJILLO y MOLINA, Rafael L. (Pres., Dom. Rep.); San Cristóbal, Dom. Rep., Oct. 24, 1891.

TRUMAN, Harry S. (Pres., U. S.); Lamar, Mo., May 8, 1884.

VANDENBERG, Arthur H. (U. S. Sen., Mich.); Grand Rapids, Mich., Mar. 22, 1884.

VINSON, Frederick M. (Ch. Just., U. S. Sup. Ct.); Louisa, Ky., Jan. 22, 1890.

VISHINSKY, Andrei Y. (For. Min., U.S.S.R.); Odessa, Rus., 1883.

WALLACE, Henry A. (former Vice Pres., U. S.); Adair Co., Iowa, Oct. 7, 1888.

WEBB, James E. (U. S. Undersec. State); Granville Co., N. C., Oct. 7, 1906.

WEIZMANN, Chaim (Pres., Israel); near Piłsk, Rus., Nov. 27, 1874.

YOSHIDA, Shigeru (Prem., Jap.); Tokyo, Jap., Sept. 22, 1878.

Leading National Associations and Societies in the U. S.

(Listed by name, address, year of founding [in parentheses], number of membership and name and title of executive.)

ADULT EDUCATION, American Association for; 167 Public Sq., Cleveland 14, Ohio, (1926), c. 2,300, Herbert C. Hunsaker, Acting Dir.

ADVERTISERS, Inc., Association of National; 285 Madison Ave., N. Y. 17, (1910), c. 500, Paul B. West, Pres.

ADVERTISING AGENCIES, Inc., American Association of; 420 Lexington Ave., N. Y. 17, (1917), 247, Frederic R. Gamble, Pres.

ADVERTISING FEDERATION of America; 330 W. 42 St., N. Y. 18, (1905), 25,000, Elon G. Borton, Pres. & Gen. Mgr.

AERONAUTICAL SCIENCES, Inc., Institute of the; 2 E. 64 St., N. Y. 21, (1932), 8,000, S. Paul Johnston, Dir.

ALCOHOLIC FOUNDATION, Inc. (Alcoholics Anonymous); 141 E. 44 St., N. Y. 17, (1935), 100,000, address correspondence to the Secretary.

ARCHITECTS, American Institute of; 1741 New York Ave. NW, Wash. 6, D. C., (1857), 8,500, Edmund R. Purves, Exec. Dir.

ARTS AND LETTERS, American Academy of; 633 West 155 St., N. Y. 32, (1904), 50, Paul Manship, Pres.

ARTS AND LETTERS, National Institute of; 633 West 155 St., N. Y. 32, (1898), 250, Douglas Moore, Pres.

ARTS AND SCIENCES, American Academy of; 28 Newbury St., Boston 16, (1780), c. 950, Howard Mumford Jones, Pres.

ASTRONOMICAL Society, American; Washburn Observatory, Madison 6, Wis., (1897), 690, Dr. C. M. Huffer, Sec.

AUDIT BUREAU OF CIRCULATIONS; 123 N. Wacker Dr., Chicago 6, (1914), 3,330, James N. Shryock, Man. Dir.

AUDUBON Society, National; 1000 Fifth Ave., N. Y. 28, (1905), 325,000, John H. Baker, Pres.

AUTHORS LEAGUE of America; 6 E. 39 St., N. Y. 16, (1912), 7,500, Oscar Hammerstein, II, Pres.

AUTOMOBILE Association, American; Pa. Ave. at 17 St. NW, Wash. 6, D. C., (1902), 2,900,000, Russell E. Singer, Exec. V. P.

AUTOMOTIVE ENGINEERS, Inc., Society of; 29 W. 39 St., N. Y. 18, (1905), 14,300, James C. Zeder, Pres.

BACTERIOLOGISTS, Society of American; 1919 Madison Ave., N. Y. 35, (1899), 3,900, John E. Blair, Sec.-Treas.

BAPTIST HOME MISSION Society, American; 212 Fifth Ave., N. Y. 10, (1832), Rev. G. Pitt Beers, Exec. Sec.

BAR Association, American; 1140 N. Dearborn St., Chicago 10, (1878), c. 42,500, Cody Fowler, Pres.

BETTER BUSINESS BUREAUS, Inc., Association of; 726 Chrysler Bldg., N. Y. 17, (1921), 91 bureaus, Victor H. Nyborg, Pres.

BIBLE Society, American; 450 Park Ave., N. Y. 22, (1816), 150,000, Rev. Eric M. North, Gen. Sec.

BIG BROTHERS of America, Inc.; Broad St. Station Bldg., Philadelphia 3, (1946), 18 agencies, Benjamin Van D. Hedges, Exec. V. P.

- B'NAI B'RITH**; 1003 K St. NW, Wash. 1, D. C., (1843), 350,000, Maurice Bisgyer, Sec.
- BOOKSELLERS Association, Inc.**, American; 31 Madison Ave., N. Y., (1900), 1,500, Gilbert E. Goodkind, Exec. Sec.
- BOY SCOUTS of America**; 2 Park Ave., N. Y. 16, (1910), 2,652,525, Arthur A. Schuck, Chief Scout Exec.
- BOYS' CLUBS of America**; 381 Fourth Ave., N. Y. 16, (1906), 3,300,000, David W. Armstrong, Exec. Dir.
- BROADCASTERS**, National Association of; 1771 N St. NW, Wash. 6, D. C., (1922), 1,450, Justin Miller, Pres.
- CALENDAR Association, World, Inc.**; 630 Fifth Ave., N. Y. 20, (1930), 14,500, Elisabeth Achelis, Pres.
- CANCER Society, American; Inc.**; 47 Beaver St., N. Y., (1913), 178, Mefford R. Runyon, Exec. V. P.
- CARE (Cooperative for American Remittances to Europe, Inc.)**; 20 Broad St., N. Y. 5, (1945), 26 agencies, Paul Comly French, Exec. Dir.
- CATHOLIC MEN**, National Council of; 1312 Mass. Ave. NW, Wash. 5, D. C., (1920), Stewart Lynch, Pres.
- CATHOLIC WAR VETERANS of the U. S.**; 711 14 St. NW, Wash., D. C., (1935), Donald J. McQuade, Natl. Comdr.
- CATHOLIC WELFARE Conference, National**; 1312 Mass. Ave. NW, Wash. 5, D. C., (1919), Rt. Rev. Monsignor Howard J. Carroll, Gen. Sec.
- CERAMIC Society, Inc.**, American; 2525 N. High St., Columbus 2, Ohio, (1899), 4,200, Charles S. Pearce, Gen. Sec.
- CHAMBER OF COMMERCE of the U. S.**; 1615 H St. NW, Wash. 6, D. C., (1912), 3,085 bureaus, Ralph Bradford, Exec. V. P.
- CHEMICAL ENGINEERS**, American Institute of; 120 E. 41 St., N. Y. 17, (1908), 10,141, Stephen L. Tyler, Exec. Sec.
- CHEMICAL Society, American**; 1155 16 St., Wash. 6, D. C., (1876), 62,684, Alden H. Emery, Exec. Sec.
- CHEMISTS, Inc.**, American Institute of; 60 E. 42 St., N. Y. 17, (1923), 2,600, Lawrence H. Flett, Pres.
- CHILDREN'S Aid Society**; 105 E. 22 St., N. Y., (1853), Arthur Huck, Exec. Dir.
- CHRISTIAN EDUCATION**, World Council of; 156 Fifth Ave., N. Y. 10, (1889), 37,500,000, Dr. Forrest L. Knapp, Gen. Sec.
- CHRISTIANS AND JEWS, Inc.**, National Conference of; 381 Fourth Ave., N. Y. 16, (1928), 100,000, Everett R. Clinchy, Pres.
- CHURCHES of CHRIST in AMERICA**, Federal Council of; 297 Fourth Ave., N. Y. 10, (1908), 29,000,000, Rev. Samuel McCrea Cavert, Gen. Sec.
- CIVIL ENGINEERS**, American Society of; 33 W. 39 St., N. Y. 18, (1852), 29,000, Wm. N. Carey, Exec. Sec.
- CIVIL LIBERTIES Union, American**; 170 Fifth Ave., N. Y. 10, (1920), 15,000, Patrick Murphy Malin, Exec. Dir.
- CIVITAN International**; 1523-28 Comer Bldg., Birmingham, Ala., (1920), 15,000, Rudolph T. Hubbard, Sec.
- COLLEGES**, Association of American; 726 Jackson Pl., Wash. 6 D. C., (1915), 670, Guy E. Snavelly, Exec. Dir.
- COLORED PEOPLE**, National Association for the Advancement of; 20 W. 40 St., (1909), 250,000, Walter White, Exec. Dir.
- COMPOSERS, AUTHORS AND PUBLISHERS**, American Society of (ASCAP); 575 Madison Ave., N. Y., (1914), 2,450, Otto A. Harbach, Pres.
- DAUGHTERS of the American Revolution**; 1776 D St. NW, Wash. 6, D. C., (1890), 167,846, Mrs. James B. Patton, Pres. Gen.
- DECORATORS**, American Institute of; 41 E. 57 St., N. Y. 22, (1931), 1,200, Mrs. M. Girard, Exec. Sec.
- DEMOLAY**, Order of; 201 E. Armour Blvd., Kansas City, Mo., (1919), 1,700,000, Frank S. Land, Sec. Gen.
- DENTAL Association, American**; 222 E. Superior St., Chicago 11, (1859), 75,603, Dr. Harold Hillenbrand, Sec.
- DIETETIC Association, American**; 620 N. Michigan Ave., Chicago 11, (1917), 8,812, Elizabeth Perry, Pres.
- EAGLES**, Fraternal Order of; 1203 Locust St., Kansas City 6, Mo., (1898), over 1,000,000, William H. Mostyn, Grand Worthy Pres.
- EDUCATION Association, National**; 1201 16 St. NW, Wash., D. C., (1857), 453,797, Willard E. Givens, Exec. Sec.
- ELECTRICAL ENGINEERS**, American Institute of; 33 W. 39 St., N. Y. 18, (1884), 35,924, H. H. Henline, Sec.
- ELKS**, Benevolent and Protective Order; 2750 Lakeview Ave., Chicago 14, (1868), 1,010,000, Joseph B. Kyle, Grand Exalted Ruler.
- ENGINEERS**, American Association of; 8 S. Michigan Ave., Chicago 3, (1915), 5,435, M. E. McIver, Sec.
- EVANGELICAL AND REFORMED CHURCH**, Board of International Missions; 905 Schaff Bldg., Philadelphia 2, (1941), Rev. Dobbs F. Ehlman, Exec. Sec.
- EXPLORERS Club**; 10 W. 72 St., N. Y. 23, (1905), 804, Dr. James P. Chapin, Pres.
- FAMILY SERVICE Association of America**; 192 Lexington Ave., N. Y. 16, (1911), 250 agencies, Frank J. Hertel, Gen. Dir.
- FARM BUREAU Federation, American**; 221 N. LaSalle St., Chicago 1, (1920), 1,409,798, Allan B. Kline, Pres.

- FIRE FIGHTERS**, Internation Association of; 207 AFL Bldg., Wash. 1, D. C., (1918), 75,000, John P. Redmond, Pres.
- FIRE PROTECTION** Association, National; 60 Batterymarch St., Boston 10, (1896) 13,000, Percy Bugbee, Gen. Mgr.
- FOREIGN POLICY** Association, Inc.; 22 E. 38 St., N. Y. 16, (1918), c. 20,000, Brooks Emeny, Pres.
- FOREIGN PRESS** Association; 50 Rockefeller Plaza, N. Y. 20, (1917), 220, Fred Vaz Dias, Gen. Sec.
- FOREIGN RELATIONS** Inc., Council on; 58 E. 68 St., N. Y., (1921), 900, Walter H. Mallory, Exec. Dir.
- FORESTERS**, Society of American; Mills Bldg., Wash. 6, D. C., (1900), 6,500, Henry Clepper, Exec. Sec.
- FOUR H Clubs**, Extension Service; U. S. Dept. of Agriculture, Wash. 25, D. C., (1914), 1,886,214, M. L. Wilson, Dir.
- FRIENDS'** General Conference; 1515 Cherry St., Philadelphia 2, (1868), 19,143, J. Barnard Walton, Sec.
- GEOGRAPHIC** Society, National; 16 and M Sts. NW, Wash., D. C., (1888), 2,000,000, Dr. Gilbert Grosvenor, Pres.
- GIDEONS** International; 212 E. Superior St., Chicago, (1899), 15,000, W. W. Gothard, Exec. Dir.
- GIRL SCOUTS** of the U. S.; 155 E. 44 St., N. Y. 17, (1912), 1,540,278, Mrs. Paul Rittenhouse, Natl. Exec. Dir.
- GRANGE**, National; 744 Jackson Pl. NW, Wash. 6, D. C., (1867), c. 850,000, Albert S. Goss, Master.
- GRAPHIC ARTS**, American Institute of; 115 E. 40 St., N. Y. 16, (1914), 1,440, Merle Armitage, Pres.
- HADASSAH**, Women's Zionist Organization of America; 1819 Broadway, N. Y. 23, (1912), 300,000, Jeannette N. Leibel, Exec. Sec.
- HEART** Association, Inc., American; 1775 Broadway, N. Y. 19, (1924), 56 assoc., Rome A. Betts, Exec. Dir.
- HEATING AND VENTILATING ENGINEERS**, American Society of; 51 Madison Ave., N. Y. 10, (1895), 7,784, A. V. Hutchinson, Exec. Sec.
- HEBREW CONGREGATIONS**, Union of American; 34 W. 6 St., Cincinnati 2, Ohio, (1873), 412 congregations, Jacob Aronson, Chmn.
- HISTORICAL** Association, American; Library of Congress Annex, Wash. 25, D. C., (1884), 5,600, Guy Stanton Ford, Exec. Sec.
- HOME MISSIONS** Council of N. A.; 297 Fourth Ave., N. Y. 10, (1908), 22 denominations, I. George Nace, Exec. Sec.
- HOME MISSIONS** of the Congregational and Christian Churches, Board of; 287 Fourth Ave., N. Y. 10, (1937), Rev. Truman B. Douglass, Exec. V. P.
- HOTEL** Association; 221 W. 57 St., N. Y. 19, (1910), 6,253, Charles A. Horrworth, Exec. V. P.
- INFANTILE PARALYSIS**, National Foundation for; 120 Broadway, N. Y. 5, (1938), 2,822 chapters, Basil O'Connor, Pres.
- IRON AND STEEL** Institute, American; 350 Fifth Ave., N. Y. 1, (1908), 100 companies, Walter S. Tower, Pres.
- IZAAK WALTON** League of America, Inc.; 31 N. State St., Chicago 2, (1922), 585 chapters, William Voigt, Jr., Exec. Dir.
- JEWISH APPEAL**, United; 165 W. 46 St., N. Y. 19, (1939), Henry Morgenthau, Jr., Gen. Chmn.
- JEWISH COMMITTEE**, American; 386 Fourth Ave., N. Y. 16, (1906), 27,300, Dr. John Slawson, Exec. V. P.
- JEWISH CONGRESS**, Inc., American; 1834 Broadway, N. Y. 23, (1917), 68,109, Rabbi Irving Miller, Pres.
- JEWISH FEDERATIONS AND WELFARE FUNDS**, Inc. Council of; 165 W. 46 St., N. Y. 19, (1932), 256 federations, H. L. Lurie, Exec. Dir.
- JEWISH HISTORICAL** Society, American; 3080 Broadway, N. Y. 27, (1892), 1,200, Isadore S. Meyer, Librarian.
- JEWISH MEN'S CLUBS**, National Federation of; 3080 Broadway, N. Y. 27, (1929), c. 25,000, Dr. Milton Nevins, Pres.
- JEWISH WELFARE** Board, National; 145 E. 32 St., N. Y. 16, (1917), 500,000, Irving Edison, Pres.
- KINDERGARTEN** Association, National; 8 W. 40 St., N. Y. 18, (1909), Bessie Locke, Exec. Sec.
- KIWANIS** International; 520 N. Michigan Ave., Chicago 11, (1915); 200,000, O. E. Peterson, Man. Dir.
- KNIGHTS OF COLUMBUS**; 45 Wall St., New Haven 7, Conn., (1882), 784,437, John E. Swift, Supreme Knight.
- KNIGHTS OF PYTHIAS**; 1054 Midland Bank Bldg., Minneapolis 1, Minn., (1864), c. 300,000, Melvin M. Ewen, Supreme Sec.
- LANDSCAPE ARCHITECTS**, Inc. American Society of; 9 Park St., Boston 8, (1899), 613, Bradford Williams, Sec.
- LEGAL AID** Association, National; 25 Exchange St., Rochester 4, N. Y., (1949), 71, Emery A. Brownell, Sec.
- LEGION**, American; 777 N. Meridan St., Indianapolis 6, Ind., (1919), 2,815,170, George N. Craig, Natl. Comdr.
- LEGION OF VALOR** of the U. S., Army and Navy; 316 Court House, Pittsburgh 19, (1890), 1,700, Lt. Ben Prager, Natl. Adj.
- LIBRARIES** Association, Special; 31 E. 10 St., N. Y. 3, (1909), c. 4,700, Mrs. Kathleen B. Stebbins, Sec.

- LIBRARY Association, American;** 50 E. Huron St., Chicago 11, (1876), c. 20,000, John Mackenzie Cory, Exec. Sec.
- LIBRARY Association, Home and School;** 114 Church St., Lexington, Ky., (1938), 5 directors, Paul J. Hines, Sec.
- LIONS CLUBS, International Association of;** 332 S. Michigan Ave., Chicago 4, (1917), 422,000, Melvin Jones, Sec.-Gen.
- LUTHER LEAGUE of America;** 1228 Spruce St., Philadelphia 7, (1895), 30,302, Roy Henrickson, Pres.
- MAGAZINE PUBLISHERS, National Association of;** 232 Madison Ave., New York 16, (1919), 101, Arch Crawford, Pres.
- MANUFACTURERS, National Association of;** 14 W. 49 St., N. Y. 20, (1895), 15,500, Earl Bunting, Man. Dir.
- MASONS (Supreme Council, 33° Ancient Accepted Scottish Rite of Freemasonry, Northern Masonic Jurisdiction);** 1117 Statler Bldg., Boston 16, (1813), 363,599, Melvin M. Johnson, Sov. Grand Comdr.
- MASONS (same as above, Southern Jurisdiction);** 1733 16 St. NW, Wash. 9, D. C., (1801), c. 350,000, John H. Cowles, Sov. Grand Comdr.
- MATHEMATICAL Society, American;** 531 W. 116 St., N. Y. 27, (1888), 4,400, J. L. Walsh, Pres.
- MAYORS, U. S. Conference of;** 730 Jackson Place NW, Wash. 6, D. C., (1932), 250 cities, Paul V. Betters, Exec. Dir.
- MECHANICAL ENGINEERS, American Society of;** 29 W. 39 St., N. Y. 18, (1880), 31,778, C. E. Davies, Sec.
- MEDICAL Association, American;** 535 N. Dearborn St., Chicago, (1847), 146,813, Dr. George F. Lull, Gen. Mgr.
- MEDICINE, N. Y. Academy of;** 2 E. 103 St., N. Y. 29, (1847), 2,500, Dr. Howard Reid Craig, Dir.
- MERCHANT MARINE Institute, Inc., American;** 11 Broadway, N. Y. 4, (1905), 70 companies, Frank J. Taylor, Pres.
- METEOROLOGICAL Society, American;** 3 Joy St., Boston 8, (1919), 4,000, Kenneth C. Spengler, Exec. Sec.
- METHODIST YOUTH, National Conference of;** 810 Broadway, Nashville 2, Tenn., (1940), 170 representatives, Rev. George Harper, Sec.
- MILITARY ENGINEERS, Society of American;** 808 Mills Bldg., Wash. 6, D. C., (1919), 18,900, Col. F. H. Kohlloss, Exec. Sec.
- MINING AND METALLURGICAL ENGINEERS, American Institute of;** 29 W. 39 St., N. Y. 18, (1871), 16,397, Edward H. Robie, Sec.
- MIZRACHI Organization of America;** 1133 Broadway, N. Y. 10, (1903), 30,000, Pinchos Churgin, Pres.
- MOOSE, Loyal Order of; Mooseheart, Ill., (1888), 1,041,139, Malcolm R. Giles, Dir. Gen.**
- MOTION PICTURE ARTS AND SCIENCES, Academy of;** 9038 Melrose Ave., Los Angeles 46, (1927), 1,800, Charles Brackett, Pres.
- MUSEUMS, American Association of;** Smithsonian Inst., Wash. 25, D. C., (1908), 1250, Laurence Coleman, Dir.
- MUSIC CLUBS, National Federation of;** 455 W. 23 St., N. Y. 11, (1898), c. 500,000, Mrs. Royden James Keith, Pres.
- NAVY LEAGUE of the U. S.;** 820 Mills Bldg., Wash. 6, D. C., (1902), 8,500, Evelyn M. Collins, Sec.
- NEWSPAPER PUBLISHERS Association, American;** 370 Lexington Ave., N. Y. 17, (1887), 784, Cranston Williams, Gen. Mgr.
- NURSES' Association, American;** 1790 Broadway, N. Y. 19, (1896), 171,341, Ella Best, Exec. Sec.
- OSTEOPATHIC Association, American;** 212 E. Ohio St., Chicago 11, (1897), 7,761, Dr. R. C. McCaughan, Exec. Sec.
- PALESTINE APPEAL, United;** 41 E. 42 St., N. Y., (1926), Judge Morris Rothenberg.
- PAN AMERICAN Union;** Wash. 6, D. C., (1890), 21 American Republics, Dr. Alberto Lleras, Sec. Gen.
- PARENTS AND TEACHERS, National Congress of;** 600 S. Michigan Blvd., Chicago 5, (1897), 6,167,079, Mrs. John E. Hayes, Pres.
- PARENTS Associations, United;** 289 Fourth Ave., N. Y. 10, (1921), 210,000, Mrs. Ruth Farbman, Pres.
- PARKS Association, National;** 1214 16 St. NW, Wash. 6, D. C., (1919), 3,500, Fred M. Packard, Exec. Sec.
- PEACE FOUNDATION, World;** 40 Mt. Vernon St., Boston 8, (1910), Raymond Dennett, Dir.
- PEN WOMEN, Inc., National League of;** 814 National Press Bldg., Wash. D. C., (1897), c. 3,800, Mrs. Dorothy Betts Marvin, Pres.
- PETROLEUM Institute, American;** 50 W. 50 St., N. Y. 20, (1919), c. 6,000, Lacey Walker, Sec.
- PHARMACEUTICAL Association, American;** 2215 Constitution Ave. NW, Wash. 7, D. C., (1852), 22,800, Robert P. Fischelis, Sec.
- PHILATELIC Society, American;** Box 800, State College, Pa., (1886), 11,544, H. Clay Musser, Exec. Sec.
- PHOTOGRAPHIC Society of America, Inc.;** 2005 Walnut St., Philadelphia 3, (1934), 10,000, John G. Mulder, Pres.
- PHYSICAL Society, American;** Columbia University, N. Y. 27, (1899), 9,000, I. I. Rabi, Pres.

- PHYSICIANS**, American College of; 4200 Pine St., Philadelphia 4, (1915), 6,800, E. R. Loveland, Exec. Sec.
- PILGRIMS** of the U. S.; 17 E. 42 St., N. Y. 17, (1903), 800, John W. Davis, Pres.
- PIONEER YOUTH** of America, Inc.; 45 Astor Place, N. Y. 3, (1924), George New, Exec. Dir.
- PLANNED PARENTHOOD** Federation of America, Inc., 501 Madison Ave., N. Y. 22, (1921), 110 organizations, Dr. D. F. Milam, Dir.
- PLANNING** Association, National; 800 21 St. NW, Wash. 6, D. C., (1934), 2,000, E. J. Coll, Dir.
- POLITICAL AND SOCIAL SCIENCE**, American Academy of; 3817 Spruce St., Philadelphia 4, (1889), 15,000, Dr. Ernest Minor Patterson, Pres.
- POLITICAL SCIENCE**, Academy of; 413 Fayerweather Hall, Columbia Univ., N. Y. 27, (1886), 11,000, Grayson L. Kirk, Pres.
- PREVENTION OF CRUELTY TO ANIMALS**, American Society for the; 50 Madison Ave., N. Y. 10, (1866), 8,169, Sydney H. Coleman, Exec. V. P.
- PREVENTION OF WAR**, National Council for; 1003 18 St. NW, Wash. 6, D. C., (1921), 156, Frederick J. Libby, Exec. Sec.
- PROFESSIONAL ENGINEERS**, National Society of; 1121 15 St. NW, Wash. 5, D. C., (1934), 22,844, Paul H. Robbins, Exec. Dir.
- PSYCHIATRIC** Association, American; 1270 Sixth Ave., N. Y. 20, (1844), 5,878, John C. Whitehorn, Pres.
- PUBLIC HEALTH** Association, American; 1790 Broadway, N. Y. 19, (1872), 12,000, Dr. Reginald M. Atwater, Exec. Sec.
- PUBLIC HEALTH NURSING**, Inc., National Organization for; 1790 Broadway, N. Y. 19, (1912), 8,500, Anna Fillmore, Gen. Dir.
- RADIO ENGINEERS**, Institute of; 1 E. 79 St., N. Y. 21, (1912), 30,000, George W. Bailey, Exec. Sec.
- RAILROADS**, Association of American; Transportation Bldg., Wash. 6, D. C., (1934), 361, William T. Faricy, Pres.
- RECREATION** Association, Inc., National; 315 Fourth Ave., N. Y. 10, (1906), 14,000, Joseph Prendergast, Exec. Dir.
- RED CROSS**, American National; 17 and D Sts. NW, Wash. 13, D. C., (1881), 18,098, 250, Gen. George C. Marshall, Pres.
- RED MEN**, Improved Order of; 1521-23 W. Girard Ave., Philadelphia 30, (1834), 250,000, Louis Buffler, Pres.
- RESEARCH** Council, National; 2101 Constitution Ave., Wash. 25, D. C. (1916), 225, Dr. Detlev W. Bronk, Chmn.
- ROSE** Society, American; 212 Crescent St., Harrisburg, Pa., (1916), 10,500, Dr. R. C. Allen, Exec. Sec.
- ROSICRUCIAN** Order (AMORC); Rosicrucian Park, San Jose, Calif., (1915), 40,000, Ralph M. Lewis, Imperator.
- ROTARY** International; 35 E. Wacker Drive, Chicago 1, (1905), 7,117 clubs, Arthur Lagueux, Pres.
- RUSSIAN** Institute for Cultural Relations with the Soviet Union, Inc., American; 58 Park Ave., N. Y. 16, (1926), Henry H. Collins, Jr., Exec. Dir.
- SAFETY** Council, National; 425 N. Michigan Ave., Chicago 11, (1913), 7,500, Ned H. Dearborn, Pres.
- SALVATION ARMY**; 120 W. 14 St., N. Y. 11, (1880), 215,094, Ernest I. Pugmire, Natl. Comdr.
- SCIENCE**, American Association for the Advancement of; 1515 Mass. Ave. NW, Wash. 5, D. C., (1848), 45,076, Dr. Howard A. Meyerhoff, Sec.
- SCIENCES**, National Academy of; 2101 Constitution Ave., Wash. 25, D. C., (1863), 461, Dr. Detlev W. Bronk, Pres.
- SCULPTURE** Society, National; 1083 Fifth Ave., N. Y. 28, (1893), c. 300, Karl H. Gruppe, Pres.
- SEAMEN'S** Service, Inc., United; 39 Broadway, N. Y. 6, (1942), 60 trustees, Otho J. Hicks, Exec. Dir.
- SEEING EYE**, Inc.; Morristown, N. J., (1929), 20,000, Henry A. Colgate, Pres.
- SHRINERS** (The Imperial Council of the Ancient Arabic Order of the Nobles of the Mystic Shrine for North America); 35 E. Wacker Drive, Chicago 1, (1876), 625,000, Hubert M. Poteat, Imperial Potentate.
- SOCIAL WORKERS**, American Assn. of; 1 Park Ave., N. Y. 16, (1921), 12,500, Joseph P. Anderson, Exec. Sec.
- SURGEONS**, American College of; 40 E. Erie St., Chicago 11, (1913), 16,250, Dr. Paul R. Hawley, Dir.
- TRAVELERS AID** Society of N. Y.; 144 E. 44th St., N. Y. 17, (1905), 9,000, David W. Haynes, Gen. Dir.
- TUBERCULOSIS** Association, Natl.; 1790 Broadway, N. Y. 19, (1904), 4,100, Dr. James E. Perkins, Man. Dir.
- UNIVERSITY PRESSES**, Association of American; Univ. of N. C. Press, Chapel Hill, N. C., (1937), 36 universities, Porter Cowles, Sec.
- UNIVERSITY PROFESSORS**, American Association of; 1101 Connecticut Ave. NW, Wash. 6, D. C., (1915), 37,500, Ralph E. Himstead, Gen. Sec.
- UNIVERSITY WOMEN**, American Association of; 1634 Eye St. NW, Wash., D. C., (1882), 115,402, Dr. Helen D. Bragdon, Gen. Dir.
- VETERANS**, Disabled American; 1423 E. McMillan St., Cincinnati 6, Ohio, (1920), 156,783, Vivian D. Corbly, Natl. Adj.

- VETERANS**, United Spanish War; 40 G St. NE, Wash. 13, D. C., (1899), 65,270, Henry H. Hunt, Comdr.-in-Chief.
- VETERANS** Committee, American (AVC), 1751 New Hampshire Ave. NW, Wash. D. C., (1943), 40,000, Michael Straight, Natl. Chmn.
- VETERANS** of Foreign Wars (VFW); 34 St. and Broadway, Kansas City 2, Mo., (1899), c. 1,500,000, Clyde A. Lewis, Comdr.-in-Chief.
- VETERANS** of World War II (AMVETS); 724 9 St. NW, Wash. 1, D. C., (1944), 150,000, Harold Russell, Natl. Comdr.
- WOMAN'S** Association, American; 111 E. 48 St., N. Y. 17, (1922), Mrs. Marion L. Van Valkenburgh, Exec. Dir.
- WOMEN** of the U. S., National Council of; 501 Madison Ave., N. Y., (1888), Mrs. Thomas G. Evans, Pres.
- WOMEN** VOTERS OF U. S., League of; 1026 17 St. NW, Wash. 6, D. C., (1920), 93,000, Mrs. John G. Lee, Pres.
- WOMEN'S CLUBS**, General Federation of; 1734 N St. NW, Wash. 6, D. C., (1890), 11,000,000, Mrs. T. S. Woods, Exec. Dir.
- WOMEN'S CLUBS**, Inc., National Federation of Business and Professional; 1819 Broadway, N. Y. 23, (1919), 155,000, Olive H. Huston, Exec. Dir.
- WOMEN'S VOLUNTARY SERVICES**, Inc., American; 500 Park Ave., N. Y. 22, (1940), 20,000, Mrs. C. Ruxton Love, Pres.
- WOODMEN CIRCLE**, Supreme Forest; 3303 Farnam St., Omaha, Nebr., (1891), 151,949, Dora Alexander Talley, Pres.
- WOODROW WILSON** Foundation; 45 E. 65 St., N. Y. 21, (1922), Mrs. Julie d'Estournelles, Exec. Dir.
- WORKMEN'S CIRCLE**; 175 E. Broadway, N. Y. 2, (1900), 70,000, Joseph Baskin, Gen. Sec.
- WORLD FEDERALISTS**, United; 7 East 12 St., N. Y., (1947), c. 40,000, Alan Cranston, Pres.
- WRITERS CLUB**, National; 1819 Gilpin St., Denver 6, Colo., (1937), 3,230, David Raffelock, Dir.
- YOUNG MEN'S CHRISTIAN** Association; 291 Broadway, N. Y. 7, (1844), 2,700,232, Eugene E. Barnett, Gen. Sec.
- YOUNG MEN'S HEBREW** Associations; See Jewish Welfare Board.
- YOUNG WOMEN'S CHRISTIAN** Association of the U. S.; 600 Lexington Ave., N. Y. 22, (1855), 3,000,000, Mrs. Harrison S. Elliott, Gen. Sec.
- YOUTH HOSTELS**, Inc., American; 6 E. 39 St., N. Y. 16, (1934), 12,000, John D. Rockefeller, III, Pres.
- ZIONIST** Organization of America; 41 E. 42 St., N. Y. 17, (1897), 750,000, Dr. Sidney Marks, Exec. Dir.
- ZOOLOGISTS**, American Society of; Hamilton College, Clinton, N. Y., (1903), 1,191, Walter N. Hess, Sec.

The National Red Cross

The American National Red Cross was first organized in 1881 as the American Association of the Red Cross by its founder and first president, Clara Barton, in accordance with the Treaty of Geneva, which the U. S. signed in 1882. It was reincorporated with its present title under government supervision on January 5, 1905, by act of Congress. On May 8, 1947, changes in the charter giving chapters majority representation in the governing body were enacted into law when a bill unanimously passed by Congress was signed by President Truman.

The President of the United States is now Honorary Chairman of the organization. President of the American National Red Cross is George C. Marshall.

National headquarters are at 17th and D Streets, N. W., Washington, D. C. Total membership, according to latest available records, include 18,098,250 adults, with 19,314,427 children and young people en-

rolled in the Junior Red Cross. The American National Red Cross has a total of 3,745 chapters and about 5,000 branches.

The primary functions of the American Red Cross are to furnish volunteer aid to the sick and wounded of armies in time of war; to serve as a medium of communication between the people of the United States and their armed forces; to provide relief in national and international calamities, and to carry on a program designed to prevent such disasters.

Many educational services in the fields of health are included in the program of the American National Red Cross—instruction in first aid, water safety, accident prevention, home nursing, and nutrition. The National Blood Program to collect, process, and distribute blood and blood derivatives for medical use, without charge for these products, to all the people of the country, in time will serve the needs of every community for these products.

ASTRONOMY AND CALENDAR

Edited by

HUGH S. RICE, A.M., Ph.D., Research Associate, Hayden Planetarium



Kinds of Time

Of the three main kinds of time (sidereal, apparent solar, and mean solar), the two kinds used in our calendar pages (local civil and standard time) are both types of mean solar time.

Sidereal time is used mostly in astronomy. It is nearly but not exactly star-time, and is measured by the diurnal rotation of the vernal equinox point in the sky. Sidereal days are shorter than solar days by about $3^m 56^s$ of mean time.

Apparent solar time is measured by the apparent diurnal rotation of the sun, and is the hour-angle of the sun $+12^h$. When the sun is at lower transit we have 0^h by apparent time; when it is on the upper meridian the apparent time is 12^h . The sun is not a good timekeeper, its eastward motion along the ecliptic being irregular, so apparent days are of unequal duration.

Mean solar time is the hour-angle of the "mean sun" $+12^h$. The mean sun is an imaginary body moving uniformly along the celestial equator. When the mean sun is on the lower meridian, the mean time is 0^h . The actual sun is sometimes ahead of and sometimes behind the mean sun, and the difference at any moment is the *equation of time*. When the sun is west of the mean sun, we have the "sun fast" situation, and the sun crosses the meridian before the mean sun; when the sun is east of the mean sun, we have the "sun slow" condition, and the sun transits after the mean sun. The equation of time helps in conversion of apparent and mean solar time. No clock runs on apparent time but ordinary clocks keep mean solar time in some form.

Local civil time (L.C.T.) is the mean solar time of a designated meridian, and its day begins with the mean sun at lower transit. This is midnight, the moment of *zero hour* (0^h). Ordinary clocks are not set to local civil time, because this time—

at any instant—varies with any change of longitude.

Standard time is the local civil time of a standard meridian, but used over an entire time-zone. In the U. S. the four zones (Eastern, Central, Mountain, and Pacific) are based upon the standard meridians of 75° , 90° , 105° , and 120° respectively. Ordinary clocks run on standard time, a type of mean solar time. In the summer, in certain localities, they run on advanced time (as daylight saving time) but this is only a clock-setting, and is actually standard time. Daylight saving time for a certain zone is the normal standard time of one zone to the east. While popular in certain metropolitan areas, it is not used for scientific observations. Advanced time is 1^h later on the clock-face than the normal standard time of the same zone.

Time zones. A time-zone chart of the entire world shows clearly how the world is divided into 24 time zones according to longitude. In a large proportion of countries, standard time is in use, and commonly the time on the clock-face reads 1 hour later for each zone east of a given zone, and 1 hour earlier for each zone west of a given zone. The zero time-zone of the world runs thru Greenwich, Eng., and the zones are so marked that the standard time at a particular station, added algebraically to the zone-number at the bottom gives the corresponding universal time or Greenwich civil time. For example, 3 A.M., M.S.T. $+ 7^h = 10^h$ U.T. or G.C.T.

Mexico, except for the northern part of Lower California, uses 90th-meridian time entirely. Canada uses the 4 standard-time zones of the U. S., and two others: (1) 60th-meridian or Atlantic standard time, for New Brunswick, Nova Scotia, and Quebec (east of 68° w.), 4^h earlier than Greenwich, and (2) 135th-meridian or Yukon standard time, 9^h earlier than Greenwich

Newfoundland and the Labrador coast use Newfoundland standard time, 3^h 30^m earlier than Greenwich. Alaska uses 4 time-zones, those based on the following meridians of west longitude: 120° (Juneau), 135° or Yukon standard time (Yakutat), 150° or Alaska standard time (Fairbanks), and 165° (Nome).

The Date-line. At any moment of time, usually there are parts of two different but contiguous days going on at different places on the earth. The change of date is made at the date-line, an imaginary line that follows essentially the course of the 180° meridian in the Pacific Ocean. At points east of the date-line the calendar day is 1 day earlier than at places to the west of

the line. At a point just west of the date-line, let us suppose it is 18^h or 6 P.M., L.C.T., on Aug. 1. At the same moment it is 12^h at long. 90° e., 6^h at long. 0°, and 0^h at long. 90° w., all of the same date, Aug. 1. West of long. 90° w., it is not yet 0^h (midnight); hence between 90° w. and 180° the date must be July 31. As one crosses the date-line going eastward his watch remains the same but the date changes abruptly to 1 day earlier, so the traveler repeats part of a calendar day. As one crosses the line going westward the date changes abruptly to one day later, causing him to omit a calendar day. (According to actual practice, the change is made at night regardless of the true moment of crossing.)

On Using the Following Calendar Pages

Sun fast and sun slow. This is the equation of time, as previously discussed.

Sunrise and sunset. For accurate results, two corrections to the tabular values are necessary: (1) interpolation for latitude, and (2) reduction to standard time. When the observer is at a latitude between two given latitudes, he computes a time for sunrise or sunset that lies between the times shown for the given latitudes. (Our table of longitudes and latitudes is a guide for one's position, but a large atlas may be consulted.) For example, on Aug. 4 the sun rises at 5:20 A.M. at lat. 30° and at 5:10 at lat. 35°, the difference being -10^m. An observer at Roscoe, Tex. (lat. 32° 27') would be about 0.5 the distance between 30° and 35°. $(0.5)(-10^m) = -5^m$, and hence at Roscoe, Tex., sunrise occurs at 5:20 + (-5^m) = 5:15 A.M., L.C.T. [New York City is $\frac{1}{2}$ the distance between 40° and 45°; Baltimore is .86 between 35° and 40°; St. Louis, Mo., is .72 between 35° and 40°.]

In the sun and moon tables, the data has to be given in LOCAL CIVIL TIME. This is *not* standard time, but has to be reduced to standard time.

To reduce local civil time to standard time, decrease the L.C.T. by 4^m for every degree the station is east of the standard meridian, or increase the L.C.T. by 4^m for every degree the station is west of the standard meridian.

Moonrise and moonset. For accurate results at any station in the U. S., three corrections are needed: (1) interpolation for latitude, (2) correction for longitudes west of 82½°, and (3) reduction to standard time.

(1) Interpolation for latitude follows the same method as for the sun.

(2) Use of the *a-factor*. The moon tables are exact for the given latitudes and for longitude 75° w. The *a-factor* adapts them to any longitude in the U. S. For observers in the eastern states and as far west as long. 82½° [Port Huron, Mich., Mans-

field, Ohio, Huntington, W. Va., Asheville, N. C., Tampa, Fla.], no *a-factor* is used. For stations in the 90° zone, between 82½° and 97½°, use the *a-factor* in the column "90°". The "*a-factor*, moonrise" is always to be added to the time of moonrise as derived from the main tables, and the "*a-factor*, moonset" is added to the time of moonset as derived. The boundary at 97½°, between the 90° and the 105° zones, runs through Grafton, N. Dak., Webster, S. Dak., Norfolk, Nebr., Salina, Kans., Oklahoma City, Okla., Fort Worth and Corpus Christi, Tex. Observers in the 105° zone, between 97½° and 112½° long., will use the "105°" *a-factor*, and those west of 112½° will use the "120°" *a-factor*, the eastern boundary (112½°) of the 120° zone going through Butte, Mont., Pocatello, Idaho, Panguitch, Utah, and Prescott, Ariz. These zones do *not* correspond to the irregular divisions of the standard-time belts.

(3) Change L.C.T. to standard time.

Example: find moonrise on Dec. 13, 1951, at Columbia, S. C. (long. 81° 2' west, lat. 34° 0' north). (a) Moonrise for 30° is 5:08 P.M.; for 35°, 4:52 P.M.; the difference is -16^m. Columbia is .8 the distance from 30° to 35°; we have $.8(-16^m) = -12^m.8 = -13^m$; 5:08 - 13^m = 4:55 P.M. (b) Add *a-factor*, moonrise, for the 80° region: 4:55 + 1^m = 4:56 P.M., L.C.T. (c) Reduce to standard time. 81° 2' - 75° = 6° 2'; hence Columbia is 6° west of the standard meridian; 6(4^m) = 24^m; 4:56 + 24^m = 5:20 P.M., E.S.T., moonrise at Columbia, S. C.

Moon's transit. This data indicates the local civil time of the moon crossing the observer's meridian. The time is the same for all latitudes. It is nearly correct for all longitudes in the U. S.; for more exact work use—for every day—a mean *a-factor* of 2^m, 4^m, 6^m. That is, for the 75° zone, use no correction; for the 90° zone add 2^m to the time in the tables; for the 105° zone add 4^m; for the 120° zone add 6^m. Afterward, reduce the L.C.T. to standard time.

JANUARY

1951

Jan.	Sun slow	a- factor, moonrise	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset
			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set		
1 Mon.	m s	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	m	m
2 Tue.	3 12	3 6	9	5 11	0 7	11 56	7 8	4 59	0 10	11 51	7 22	4 45	0 14	11 46	7 38	4 28	0 17	11 40	6 5	3
3 Wed.	3 40	3 6	9	5 56	5 12	1 11	12 29	7 8	5 0	1 17	12 21	7 22	4 46	1 24	12 12	7 39	4 29	1 32	12 2	4
4 Thu.	4 36	3 6	10	6 56	5 12	2 18	1 7	7 8	5 0	2 27	12 57	7 22	4 46	2 39	12 44	7 39	4 30	2 52	12 29	5
5 Fri.	5 4	3 6	9	6 57	5 14	3 23	1 54	7 9	5 1	3 42	1 40	7 22	4 47	3 58	1 23	7 39	4 31	3 8	43	6
6 Sat.	5 31	3 6	9	6 57	5 14	4 42	2 49	7 9	5 2	4 58	2 33	7 22	4 48	5 18	2 14	7 38	4 32	5 38	1 51	8
7 Sun.	5 57	3 5	8	6 57	5 14	5 53	3 54	7 9	5 3	6 10	3 37	7 22	4 49	6 31	3 17	7 38	4 33	6 55	2 53	9
8 Mon.	6 23	2 4	7	6 57	5 16	6 58	5 5	7 9	5 4	7 14	4 50	7 22	4 50	7 34	4 31	7 38	4 34	7 56	4 9	10
9 Tue.	6 49	1 3	4	6 57	5 17	7 53	6 19	7 9	5 4	8 7	6 6	7 22	4 51	8 24	5 50	7 38	4 35	8 42	5 31	1
10 Wed.	7 14	1 2	3	6 57	5 18	8 38	7 29	7 9	5 5	8 49	7 20	7 22	4 52	9 2	7 8	7 38	4 36	9 17	6 55	2
11 Thu.	7 39	1 2	3	6 57	5 18	9 16	8 35	7 9	5 6	9 24	8 29	7 22	4 53	9 32	8 22	7 38	4 38	9 43	8 14	3
12 Fri.	8 3	1 2	3	6 57	5 18	9 49	9 37	7 9	5 7	9 53	9 35	7 22	4 54	9 58	9 32	7 37	4 39	10 4	9 28	4
13 Sat.	8 26	1 2	3	6 57	5 20	10 16	11 33	7 8	5 9	10 44	11 37	7 21	4 55	10 41	11 41	7 36	4 41	10 39	11 46	5
14 Sun.	8 49	1 2	3	6 57	5 21	11 14	.....	7 8	5 10	11 8	.....	7 21	4 57	11 3	.....	7 36	4 42	10 56	.....	6
15 Mon.	9 11	1 2	3	6 57	5 22	11 42	0 30	7 8	5 11	11 34	0 36	7 21	4 58	11 25	0 44	7 36	4 43	11 14	0 53	7
16 Tue.	9 32	1 2	3	6 57	5 23	12 13	1 26	7 8	5 12	12 3	1 35	7 20	4 59	11 51	1 46	7 35	4 45	11 36	2 0	8
17 Wed.	9 53	1 3	4	6 57	5 24	12 49	2 22	7 8	5 13	12 36	2 34	7 20	5 0	12 19	2 49	7 34	4 46	12 2	3 7	9
18 Thu.	10 13	2 4	5	6 56	5 24	1 29	3 20	7 7	5 14	1 14	3 34	7 19	5 2	12 55	3 51	7 34	4 47	12 35	4 12	10
19 Fri.	10 32	2 4	6	6 56	5 25	2 15	4 15	7 7	5 15	1 58	4 32	7 19	5 3	1 38	4 51	7 33	4 49	1 16	5 14	11
20 Sat.	10 51	2 5	7	6 56	5 26	3 7	5 10	7 6	5 16	2 50	5 26	7 18	5 4	2 31	5 45	7 32	4 50	2 7	6 9	12
21 Sun.	11 8	3 5	8	6 56	5 27	4 3	6 0	7 6	5 17	3 47	6 15	7 18	5 5	3 29	6 34	7 32	4 51	3 7	6 57	13
22 Mon.	11 25	3 5	8	6 56	5 28	5 2	6 44	7 6	5 18	4 48	6 59	7 17	5 6	4 33	7 15	7 31	4 52	4 14	7 36	14
23 Tue.	11 42	3 5	8	6 55	5 29	6 2	7 23	7 5	5 19	5 51	7 36	7 17	5 7	5 39	7 49	7 30	4 54	5 24	8 6	15
24 Wed.	11 57	3 6	8	6 55	5 30	7 2	7 59	7 5	5 20	6 54	8 8	7 16	5 8	6 45	8 18	7 29	4 55	6 35	8 31	16
25 Thu.	12 12	3 6	8	6 54	5 30	8 2	8 30	7 4	5 21	7 57	8 37	7 15	5 10	7 52	8 44	7 28	4 57	7 46	8 52	17
26 Fri.	12 26	3 6	8	6 54	5 31	9 1	9 0	7 4	5 22	9 0	9 3	7 15	5 11	8 58	9 7	7 28	4 58	8 56	9 11	18
27 Sat.	12 39	3 6	9	6 54	5 32	10 3	9 29	7 3	5 23	10 3	9 28	7 14	5 12	10 15	9 29	7 27	4 59	10 9	9 29	19
28 Sun.	12 51	3 6	9	6 53	5 33	11 3	9 58	7 2	5 24	11 8	9 55	7 13	5 13	11 15	9 51	7 26	5 1	11 22	9 46	20
29 Mon.	13 3	3 6	9	6 53	5 34	.....	10 29	7 2	5 25	.....	10 22	7 12	5 14	.....	10 15	7 25	5 2	.....	10 6	21
30 Tue.	13 13	3 6	9	6 52	5 35	0 8	11 5	7 1	5 26	0 17	10 55	7 12	5 16	0 26	10 44	7 24	5 4	0 38	10 30	22
31 Wed.	13 23	3 6	10	6 52	5 36	1 16	11 47	7 0	5 27	1 27	11 33	7 11	5 17	1 41	11 19	7 22	5 5	1 58	11 0	23

Moon's
phases

E.S.T.
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FEBRUARY
1951

[illegible]

MARCH 1951

Mar.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset	90°	105°	120°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		Sun- rise	Moon- rise	Moon- set	Sun- set	Sun- rise	Moon- rise	Moon- set	Sun- set	Sun- rise	Moon- rise	Moon- set	Sun- set	Sun- rise	Moon- rise	Moon- set																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1 Thu.	12 36	m	m	6 27	5 58	h	6 31	h	6 35	h	5 51	h	6 40	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27	h	6 27

APRIL 1951

Moons
phases

E.S.T.
d h m
● 6 5 52
○ 14 7 55
○ 21 4 30
○ 28 7 17

C.S.T.
d h m
● 6 4 52
○ 14 6 55
○ 21 3 30
○ 28 6 17

M.S.T.
d h m
● 6 3 52
○ 14 5 55
○ 21 2 30
○ 28 5 17

P.S.T.
d h m
● 6 2 52
○ 14 4 55
○ 21 1 30
○ 28 4 17

Apr.	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				a- factor, moonset		Moon's upper transit				
	Sun slow	Sun- rise		Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set							
		m	s		h	m	h	m	h	m	h	m	h	m	h	m	h	m		h			
1 Sun.	4 12	1	3	4	5 51	6 18	3 3	1 45	5 48	6 20	3 15	1 34	5 46	6 23	3 29	1 22	5 43	6 26	3 45	1 7	8 21	3	m
2 Mon.	4 34	1	2	3	5 50	6 19	3 41	2 50	5 47	6 21	3 49	2 43	5 44	6 24	3 59	2 35	5 41	6 28	4 11	2 24	9 12	3	m
3 Tue.	4 36	1	2	3	5 48	6 19	4 13	3 52	5 46	6 22	4 19	3 48	5 43	6 25	4 25	3 44	5 39	6 29	4 32	3 38	9 59	3	m
4 Wed.	3 18	1	2	3	5 47	6 20	4 44	4 52	5 44	6 23	4 45	4 51	5 41	6 26	4 48	4 51	5 37	6 30	4 51	3 58	10 44	3	m
5 Thu.	3 1	1	2	3	5 46	6 20	5 12	5 50	5 43	6 24	5 10	5 53	5 40	6 27	5 9	5 56	5 35	6 31	5 8	5 59	11 27	3	m
6 Fri.	2 43	1	2	3	5 45	6 21	5 40	6 48	5 42	6 24	5 35	6 54	5 38	6 28	5 31	7 1	5 34	6 33	5 26	7 9	12 10	3	m
7 Sat.	2 26	1	2	3	5 44	6 22	6 9	7 46	5 40	6 25	6 54	5 36	6 29	5 54	8 6	5 32	6 34	5 44	8 18	12 54	3	m	
8 Sun.	2 9	1	2	3	5 42	6 23	6 41	8 45	5 39	6 26	6 31	8 57	5 35	6 30	6 19	9 11	5 30	6 35	6 57	9 27	1 39	3	m
9 Mon.	1 53	1	3	4	5 41	6 23	7 16	9 43	5 38	6 27	7 3	9 57	5 33	6 31	6 48	10 15	5 28	6 36	7 31	10 35	2 27	3	m
10 Tue.	1 36	2	3	5	5 41	6 24	7 56	10 49	5 36	6 28	7 41	10 57	5 32	6 32	7 22	11 16	5 26	6 38	7 3	11 38	3 16	2	m
11 Wed.	1 20	2	4	6	5 39	6 24	8 41	11 35	5 35	6 28	8 24	11 52	5 30	6 33	8 4	.....	5 24	6 39	7 43	.....	4 7	2	m
12 Thu.	1 4	2	5	7	5 38	6 25	9 31	.....	5 34	6 29	9 14	.....	5 29	6 34	8 54	0 12	5 23	6 40	8 31	0 35	4 59	2	m
13 Fri.	0 48	3	5	8	5 37	6 25	10 26	0 25	5 32	6 30	10 9	0 41	5 27	6 35	9 51	1 1	5 21	6 42	9 28	1 24	5 50	2	m
14 Sat.	0 33	3	5	8	5 36	6 26	11 23	1 10	5 31	6 31	11 9	1 25	5 26	6 36	10 52	1 42	5 19	6 43	10 32	2 3	6 39	2	m
15 Sun.	0 17	3	5	8	5 34	6 26	12 24	1 50	5 30	6 32	12 10	2 3	5 24	6 37	11 59	2 17	5 17	6 44	11 40	2 35	7 27	1	m
16 Mon.	FAST	3	6	8	5 33	6 27	1 21	2 26	5 28	6 32	1 12	2 35	5 22	6 38	1 2	2 47	5 16	6 45	12 50	3 1	8 13	1	m
17 Tue.	0 12	3	6	8	5 32	6 28	2 21	2 57	5 27	6 33	2 15	3 5	5 21	6 39	2 9	3 13	5 14	6 46	2 2	3 22	8 59	1	m
18 Wed.	0 26	3	6	9	5 31	6 28	3 22	3 57	5 26	6 34	3 20	3 32	5 20	6 40	3 16	3 36	5 12	6 48	3 13	3 41	9 44	1	m
19 Thu.	0 40	3	6	9	5 30	6 29	4 24	4 57	5 24	6 35	4 25	3 58	5 18	6 41	4 26	3 59	5 10	6 49	4 28	4 1	10 30	1	m
20 Fri.	0 53	3	6	9	5 29	6 30	5 29	5 48	5 23	6 36	5 34	4 25	5 16	6 42	5 39	4 22	5 9	6 50	5 45	4 18	11 18	1	m
21 Sat.	1 6	3	7	10	5 28	6 30	6 37	5 0	5 22	6 36	6 45	4 55	5 15	6 43	6 54	4 48	5 7	6 52	7 5	4 39	.....	1	m
22 Sun.	1 19	3	7	10	5 27	6 31	7 48	5 38	5 21	6 37	8 0	5 28	5 14	6 44	8 14	5 17	5 5	6 53	8 30	5 4	0 10	1	m
23 Mon.	1 31	3	6	10	5 26	6 31	9 1	6 21	5 20	6 38	9 16	6 9	5 12	6 45	9 34	5 54	5 4	6 54	9 55	5 36	1 7	2	m
24 Tue.	1 42	3	6	8	5 25	6 32	10 13	7 13	5 18	6 39	10 29	6 58	5 11	6 46	10 50	6 39	5 2	6 55	11 12	6 18	2 9	2	m
25 Wed.	1 54	2	5	7	5 24	6 33	11 18	8 14	5 17	6 40	11 35	7 57	5 10	6 47	11 56	7 37	5 0	6 57	.....	7 13	3 13	3	m
26 Thu.	2 4	2	4	6	5 23	6 33	.....	9 20	5 16	6 40	.....	9 4	5 8	6 48	.....	8 44	4 59	6 58	0 18	8 21	4 18	3	m
27 Fri.	2 14	2	4	5	5 22	6 34	0 15	10 29	5 15	6 41	0 31	10 15	5 7	6 49	0 49	9 58	4 57	6 59	1 9	9 38	5 21	3	m
28 Sat.	2 24	1	3	4	5 21	6 35	1 3	11 38	5 14	6 42	1 15	11 27	5 4	6 50	1 30	11 13	4 56	7 0	1 47	10 57	6 18	3	m
29 Sun.	2 33	1	2	3	5 20	6 35	1 42	12 44	5 13	6 43	1 52	12 36	5 4	6 51	2 3	12 26	4 54	7 2	2 16	12 15	7 10	3	m
30 Mon.	2 42	1	2	3	5 19	6 36	2 16	1 45	5 11	6 44	2 23	1 41	5 3	6 52	2 30	1 35	4 52	7 3	2 38	1 29	7 58	3	m

APRIL
1951

MOON'S PHASES

● 6 52
☾ 14 7 55
○ 21 4 30
☾ 28 7 17

E.S.T.
d h m
● 6 52
☾ 14 7 55
○ 21 4 30
☾ 28 7 17

C.S.T.
d h m
● 6 42
☾ 14 6 55
○ 21 3 30
☾ 28 6 17

M.S.T.
d h m
● 6 42
☾ 14 6 55
○ 21 3 30
☾ 28 6 17

P.S.T.
d h m
● 6 52
☾ 14 5 55
○ 21 2 30
☾ 28 5 17

C.P.T.
d h m
● 6 52
☾ 14 4 55
○ 21 1 30
☾ 28 4 17

Moon's phases

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JUNE 1951

Moons
phases

E.S.T.

d h m
● 4 11 48
☾ 12 1 52
☾ 19 7 35
☾ 26 1 21

C.S.T.

d h m
● 4 10 40
☾ 12 12 52
☾ 19 6 36
☾ 26 0 21

M.S.T.

d h m
● 4 9 40
☾ 12 11 52
☾ 19 5 36
☾ 25 11 21

P.S.T.

d h m
● 4 8 40
☾ 12 10 52
☾ 19 4 36
☾ 25 10 21

June	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				a- factor, moonset	
	Sun		Moon		Sun		Moon		Sun		Moon		Sun		Moon		90°	105° 120°
	m	s	h	m	h	m	h	m	h	m	h	m	h	m	h	m		
1 Fri.	2 27	1	4 59	6 56	4 30	4 47	7 8	3 5	4 34	7 22	2 26	4 51	4 17	7 38	2 15	5 5	m	m
2 Sat.	2 18	1	4 59	6 56	3 16	5 27	4 47	3 5	4 30	7 22	2 52	5 55	4 16	7 39	2 37	6 12	m	m
3 Sun.	2 9	2	4 59	6 56	3 52	6 25	4 47	7 9	3 39	6 40	3 22	6 57	4 16	7 40	3 5	7 18	m	m
4 Mon.	1 59	2	4 59	6 57	4 34	7 21	4 46	7 10	4 18	7 37	4 32	7 24	4 16	7 41	3 39	8 19	m	m
5 Tue.	1 49	2	4 59	6 58	5 21	8 14	4 46	7 10	5 4	8 30	4 32	7 24	4 15	7 42	4 21	9 13	m	m
6 Wed.	1 38	2	4 58	6 58	6 12	9 2	4 46	7 11	5 56	9 18	4 32	7 25	4 15	7 42	5 13	10 38	m	m
7 Thu.	1 27	3	4 58	6 59	7 8	9 45	4 46	7 11	6 52	9 59	4 31	7 26	4 14	7 43	6 12	11 54	m	m
8 Fri.	1 16	3	4 58	6 59	8 4	10 23	4 46	7 12	8 51	11 6	4 31	7 27	4 14	7 44	7 17	11 4	m	m
9 Sat.	1 5	3	4 58	7 0	9 2	10 56	4 46	7 12	8 51	11 6	4 31	7 27	4 14	7 44	8 24	11 28	m	m
10 Sun.	0 53	3	4 58	7 0	10 0	11 27	4 45	7 13	9 51	11 32	4 31	7 28	4 13	7 45	9 31	11 48	m	m
11 Mon.	0 41	3	4 58	7 1	10 57	11 55	4 45	7 13	10 51	11 58	4 31	7 28	4 13	7 46	10 39	.....	m	m
12 Tue.	0 29	3	4 58	7 1	11 54	.....	4 45	7 14	11 52	.....	4 30	7 29	4 13	7 46	11 48	0 6	m	m
13 Wed.	0 17	3	4 58	7 1	12 53	0 23	4 45	7 14	12 54	0 23	4 30	7 29	4 12	7 47	12 58	0 24	m	m
14 Thu.	SLOW	0 8	4 58	7 2	1 55	0 52	4 45	7 15	1 59	0 50	4 30	7 30	4 12	7 47	1 22	0 42	m	m
15 Fri.	0 8	3	4 58	7 2	3 0	1 24	4 45	7 15	3 9	1 18	4 30	7 30	4 11	7 48	3 30	1 2	m	m
16 Sat.	0 20	3	4 58	7 2	4 10	2 1	4 45	7 15	4 23	1 51	4 30	7 30	4 10	7 48	4 53	1 26	m	m
17 Sun.	0 33	3	4 58	7 3	5 24	2 44	4 45	7 16	5 39	2 31	4 30	7 31	4 10	7 49	6 17	1 58	m	m
18 Mon.	0 46	3	4 59	7 3	6 38	3 37	4 45	7 16	6 54	3 21	4 30	7 31	4 12	7 49	7 37	2 41	m	m
19 Tue.	0 59	2	4 59	7 3	7 46	4 40	4 46	7 16	8 2	4 23	4 30	7 31	4 12	7 49	8 44	3 40	m	m
20 Wed.	1 12	2	4 59	7 4	8 45	5 51	4 46	7 17	8 59	5 35	4 31	7 32	4 13	7 50	9 37	4 53	m	m
21 Thu.	1 25	1	4 59	7 4	9 34	7 5	4 46	7 17	9 46	6 51	4 31	7 32	4 13	7 50	10 15	6 16	m	m
22 Fri.	1 38	1	4 59	7 4	10 14	8 18	4 46	7 17	10 23	8 7	4 31	7 32	4 13	7 50	10 44	7 40	m	m
23 Sat.	1 51	1	4 59	7 4	10 49	9 27	4 46	7 17	10 54	9 19	4 31	7 32	4 13	7 50	11 6	9 1	m	m
24 Sun.	2 4	1	4 59	7 4	11 20	10 31	4 46	7 17	11 21	10 27	4 31	7 32	4 13	7 50	11 26	10 18	m	m
25 Mon.	2 16	1	4 59	7 4	11 48	11 31	4 47	7 18	11 47	11 31	4 32	7 32	4 14	7 50	11 44	11 31	m	m
26 Tue.	2 29	1	4 59	7 5	.....	12 30	4 47	7 18	.....	.....	4 32	7 33	4 14	7 51	.....	12 40	m	m
27 Wed.	2 42	1	4 59	7 5	0 17	1 27	4 48	7 18	0 12	1 33	4 32	7 33	4 14	7 51	0 1	1 48	m	m
28 Thu.	2 54	1	4 59	7 5	0 45	2 24	4 48	7 18	0 39	2 33	4 33	7 33	4 15	7 51	0 20	2 56	m	m
29 Fri.	3 7	1	4 59	7 5	1 17	3 22	4 48	7 18	1 7	3 34	4 33	7 33	4 15	7 50	0 42	4 8	m	m
30 Sat.	3 19	1	4 59	7 5	1 53	4 20	4 48	7 18	1 40	4 34	4 34	7 33	4 16	7 50	1 7	5 10	m	m

JULY 1951

July	Sun slow	a- factor, moonrise		LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset		
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set							
1 Sun.	m 3 31	m 2 3	m 5 5	h 7 5	h 7 5	h 2 32	h 5 16	h 4 49	h 7 18	h 2 18	h 5 32	h 4 34	h 7 33	h 1 59	h 5 51	h 4 16	h 7 50	h 4 16	h 7 50	h 1 40	h 6 13	h 9 52	m 5 7
2 Mon.	3 43	2 4	6 5	2 7	3 17	6 10	4 9	4 49	7 18	3 1	6 27	4 34	7 33	2 41	6 46	4 17	7 50	4 20	7 50	2 20	7 9	10 43	m 4 6
3 Tue.	3 54	2 5	7 5	2 7	5 4	7 0	4 50	7 18	3 51	7 16	4 35	7 32	3 31	7 35	4 17	7 50	4 9	7 50	3 9	7 57	11 35	m 3 5	
4 Wed.	4 5	3 5	8 5	3 7	5 5	2 7 44	4 50	7 18	4 46	7 59	4 36	7 32	4 28	8 15	4 18	7 50	4 6	7 50	4 6	8 36	12 25	m 3 4	
5 Thu.	4 16	3 5	8 5	3 7	5 5	5 59	8 23	4 51	7 18	5 45	8 36	4 36	7 32	5 29	8 50	4 19	7 50	5 9	7 50	5 9	9 7	m 2 4	
6 Fri.	4 27	3 5	8 5	4 7	5 5	6 57	8 58	4 51	7 17	6 45	9 8	4 37	7 32	6 31	9 19	4 19	7 49	6 16	7 49	6 16	9 32	m 2 3	
7 Sat.	4 37	3 5	8 5	4 7	5 5	7 54	9 29	4 52	7 17	7 45	9 36	4 37	7 32	7 35	9 44	4 21	7 49	7 23	7 49	7 23	9 53	m 2 3	
8 Sun.	4 47	3 5	8 5	4 7	5 5	8 51	9 58	4 52	7 17	8 45	10 2	4 38	7 31	8 38	10 6	4 21	7 48	8 31	7 48	8 31	10 12	m 2 3	
9 Mon.	4 57	3 5	8 5	4 7	5 5	9 48	10 26	4 53	7 17	9 44	10 26	4 38	7 31	9 42	10 27	4 21	7 48	9 38	7 48	9 38	10 23	m 2 3	
10 Tue.	5 6	3 5	8 5	4 7	5 5	10 45	10 53	4 53	7 16	10 45	10 51	4 39	7 31	10 46	10 49	4 22	7 48	10 47	7 48	10 47	10 47	m 2 3	
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14 Sat.	5 38	3 6	10 5	4 7	5 5	3 2	0 35	4 56	7 15	3 15	0 24	4 42	7 29	3 31	0 10	4 25	7 45	3 50	8 14	2 3	m 2 5	
15 Sun.	5 44	3 6	9 5	4 7	5 5	4 14	1 22	4 56	7 15	4 29	1 7	4 43	7 28	4 49	0 50	4 26	7 45	5 11	0 31	9 17	2 4	m 2 6	
16 Mon.	5 51	3 5	8 5	4 7	5 5	5 24	2 19	4 57	7 14	5 40	2 2	4 43	7 28	6 1	1 43	4 27	7 44	6 24	7 44	6 24	1 20	m 3 5	
17 Tue.	5 56	2 4	6 5	4 7	5 5	6 27	3 25	4 58	7 14	6 42	3 8	4 44	7 27	7 2	2 49	4 28	7 43	7 23	7 43	7 23	11 31	m 3 6	
18 Wed.	6 2	2 3	5 5	4 7	5 5	7 21	4 38	4 58	7 13	7 34	4 22	4 45	7 27	7 51	4 5	4 29	7 42	8 8	7 42	8 8	3 44	m 3 7	
19 Thu.	6 6	1 3	4 5	4 7	5 5	8 6	5 52	4 59	7 13	8 16	5 40	4 46	7 26	8 28	5 26	4 30	7 42	8 42	7 42	8 42	5 3	m 3 7	
20 Fri.	6 11	1 2	3 5	4 7	5 5	9 11	7 5	5 0	7 12	8 51	6 56	4 46	7 25	8 58	6 46	4 31	7 41	9 8	7 41	9 8	6 34	m 3 10	
21 Sat.	6 14	1 2	3 5	4 7	5 5	9 17	8 14	5 0	7 12	9 21	8 8	4 47	7 25	9 24	8 2	4 32	7 40	9 29	7 40	9 29	7 55	m 3 9	
22 Sun.	6 17	1 2	3 5	4 7	5 5	9 48	9 18	5 1	7 11	9 47	9 16	4 48	7 24	9 48	9 14	4 33	7 39	9 48	7 39	9 48	9 11	m 3 9	
23 Mon.	6 20	1 2	3 5	4 7	5 5	10 17	10 18	5 2	7 10	10 13	10 20	4 49	7 23	10 10	10 23	4 35	7 38	10 25	7 38	10 25	9 39	m 3 8	
24 Tue.	6 22	1 2	3 5	4 7	5 5	10 46	11 18	5 2	7 10	10 40	11 23	4 50	7 22	10 33	11 29	4 35	7 37	10 24	7 37	10 24	11 36	m 3 8	
25 Wed.	6 23	1 2	4 5	4 7	5 5	11 18	12 16	5 3	7 9	11 8	12 25	4 51	7 21	10 58	12 35	4 36	7 36	10 45	7 36	10 45	12 45	m 3 5	
26 Thu.	6 24	1 3	4 5	4 7	5 5	11 52	1 15	5 4	7 8	11 40	1 26	4 52	7 21	11 25	1 39	4 37	7 35	11 10	7 35	11 10	1 54	m 3 5	
27 Fri.	6 24	2 3	5 5	4 7	5 5	.....	2 13	5 5	7 8	.....	2 26	4 52	7 20	11 58	2 43	4 38	7 34	11 39	7 34	11 39	3 2	m 3 5
28 Sat.	6 24	2 3	5 5	4 7	5 5	6 57	0 31	5 5	7 0	1 16	3 26	4 53	7 19	.....	3 44	4 39	7 33	.....	4 6	7 33	4 6	m 3 8
29 Sun.	6 23	2 4	6 5	4 7	5 5	1 14	4 5	5 6	7 6	0 58	4 22	4 54	7 18	0 49	4 41	4 40	7 32	0 17	7 32	0 17	5 5	m 2 7	
30 Mon.	6 21	2 4	7 5	4 7	5 5	2 3	4 56	5 7	7 5	1 46	5 13	4 55	7 17	1 27	5 32	4 42	7 30	1 3	7 30	1 3	5 55	m 2 4	
31 Tue.	6 19	2 5	7 5	4 7	5 5	2 56	5 43	5 8	7 4	2 40	5 58	4 56	7 16	2 21	6 16	4 43	7 29	1 58	7 29	1 58	6 37	m 2 3	

AUGUST 1951

Moon's
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○ 10 7 22
☾ 16 9 59
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C.S.T.
d h m

● 2 4 39
○ 10 6 22
☾ 16 8 59
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M.S.T.
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☾ 16 7 59
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P.S.T.
d h m

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Aug.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				a- factor, moonset	Moon's upper transit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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LOCAL CIVIL TIME Latitude 30° n.										LOCAL CIVIL TIME Latitude 35° n.										LOCAL CIVIL TIME Latitude 40° n.										LOCAL CIVIL TIME Latitude 45° n.										Moon's phases	E.S.T. d h m p 7 7 0 o 14 7 51 c 22 6 55 ● 30 8 54	C.S.T. d h m p 7 6 0 o 14 6 51 c 22 5 55 ● 30 7 54	M.S.T. d h m p 7 5 0 o 14 5 51 c 22 4 55 ● 30 6 54	P.S.T. d h m p 7 4 0 o 14 4 51 c 22 3 55 ● 30 5 54																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Sun fast		a- factor, moonrise		Sun- rise		Moon- rise		Sun- set		Moon- set		Sun- rise		Moon- rise		Sun- set		Moon- set		Sun- rise		Moon- rise		Sun- set		Moon- set		Moon's upper transit		a- factor, moonset																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
m	s	m	m	90°	105°	120°	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m						m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

NOVEMBER

1951

Nov.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset	
		Sun-rise		Moon-rise		Sun-rise		Moon-rise		Sun-rise		Moon-rise		Sun-rise		Moon-rise				
		h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m			
1 Thu.	16 20	6 13	5 14	8 35	6 44	6 20	5 7	8 50	6 29	6 28	4 59	9 8	6 11	6 37	4 50	9 29	5 48	1 41	2	m
2 Fri.	16 22	6 14	5 13	9 44	7 46	6 21	5 6	10 1	7 29	6 29	4 58	10 21	7 9	6 38	4 48	10 44	6 45	2 45	5	m
3 Sat.	16 23	6 15	5 12	10 48	8 53	6 22	5 5	11 4	8 37	6 30	4 57	11 24	8 18	6 40	4 47	11 46	7 55	3 49	6	m
4 Sun.	16 23	6 16	5 12	11 43	10 3	6 23	5 4	11 58	9 49	6 31	4 56	12 16	9 33	6 41	4 46	12 35	9 14	4 51	3	m
5 Mon.	16 22	6 16	5 11	12 30	11 12	6 24	5 3	12 42	11 1	6 32	4 54	12 55	10 48	6 42	4 44	1 11	10 33	5 48	3	m
6 Tue.	16 21	6 17	5 10	1 9	.....	6 25	5 2	1 18	.....	6 34	4 53	1 28	.....	6 44	4 43	1 39	11 52	6 40	3	m
7 Wed.	16 19	6 18	5 9	1 43	0 18	6 26	5 1	1 49	0 11	6 35	4 52	1 55	0 2	6 45	4 42	2 0	.....	7 29	3	m
8 Thu.	16 16	6 19	5 9	2 14	1 22	6 27	5 0	2 16	1 18	6 36	4 51	2 19	1 13	6 47	4 40	2 21	1 8	8 15	3	m
9 Fri.	16 12	6 19	5 8	2 43	2 22	6 28	5 0	2 42	2 22	6 37	4 50	2 41	2 22	6 48	4 39	2 21	8 59	3	6	m
10 Sat.	16 7	6 20	5 7	3 12	3 22	6 29	4 59	3 9	3 25	6 38	4 49	3 4	3 29	6 49	4 38	2 58	3 33	9 43	3	m
11 Sun.	16 1	6 21	5 7	3 44	4 22	6 30	4 58	3 36	4 28	6 39	4 48	3 27	4 35	6 51	4 37	3 18	4 44	10 29	3	m
12 Mon.	15 55	6 22	5 6	4 16	5 22	6 31	4 57	4 6	5 31	6 40	4 47	3 54	5 42	6 52	4 36	3 41	5 55	11 16	3	m
13 Tue.	15 48	6 23	5 6	4 54	6 22	6 32	4 57	4 41	6 34	6 42	4 46	4 26	6 49	6 53	4 34	4 9	7 5	.....	3	m
14 Wed.	15 40	6 24	5 5	5 36	7 22	6 33	4 56	5 21	7 37	6 43	4 46	5 3	7 54	6 55	4 33	4 43	8 14	0 5	3	m
15 Thu.	15 31	6 24	5 4	6 23	8 21	6 34	4 55	6 7	8 37	6 44	4 45	5 46	8 55	6 56	4 32	5 25	9 18	0 56	2	m
16 Fri.	15 21	6 25	5 4	7 14	9 15	6 34	4 55	6 58	9 31	6 45	4 44	6 39	9 51	6 58	4 31	6 16	10 14	1 49	4	m
17 Sat.	15 10	6 26	5 4	8 10	10 4	6 35	4 54	7 54	10 20	6 46	4 43	7 36	10 39	6 59	4 30	7 11	11 1	2 41	2	m
18 Sun.	14 59	6 27	5 3	9 6	10 48	6 36	4 53	8 52	11 3	6 47	4 42	8 37	11 19	7 0	4 29	8 18	11 38	3 31	3	m
19 Mon.	14 47	6 28	5 3	10 3	11 26	6 37	4 53	9 51	11 39	6 48	4 42	9 39	11 52	7 2	4 28	9 24	12 8	4 19	1	m
20 Tue.	14 33	6 28	5 2	11 0	11 59	6 38	4 52	10 51	12 10	6 50	4 41	10 41	12 20	7 3	4 28	10 30	12 32	5 5	1	m
21 Wed.	14 19	6 29	5 2	11 56	12 30	6 39	4 52	11 50	12 37	6 51	4 40	11 44	12 45	7 4	4 27	11 37	12 53	5 48	1	m
22 Thu.	14 5	6 30	5 2	.....	12 59	6 40	4 51	.....	1 2	6 52	4 40	.....	1 6	7 6	4 26	.....	1 12	6 31	1	m
23 Fri.	13 49	6 31	5 1	0 52	1 26	6 41	4 51	0 49	1 27	6 53	4 39	0 46	1 28	7 7	4 25	0 43	1 29	7 13	1	m
24 Sat.	13 32	6 32	5 1	1 49	1 54	6 42	4 50	1 50	1 53	6 54	4 38	1 51	1 50	7 8	4 24	1 52	1 47	7 55	1	m
25 Sun.	13 15	6 33	5 1	2 49	2 25	6 43	4 50	2 53	2 20	6 55	4 38	2 58	2 13	7 9	4 24	3 3	2 6	8 40	1	m
26 Mon.	12 57	6 34	5 1	3 52	3 0	6 44	4 50	4 0	2 51	6 56	4 38	4 8	2 41	7 11	4 23	4 18	2 29	9 29	1	m
27 Tue.	12 38	6 34	5 0	5 0	3 41	6 45	4 50	5 11	3 29	6 57	4 37	5 23	3 15	7 12	4 22	5 38	2 58	10 23	2	m
28 Wed.	12 19	6 35	5 0	6 11	4 30	6 46	4 49	6 26	4 15	6 58	4 37	6 41	3 58	7 13	4 22	7 1	3 37	11 22	3	m
29 Thu.	11 58	6 36	5 0	7 24	5 26	6 47	4 49	7 40	5 13	7 0	4 36	7 59	4 54	7 14	4 21	8 21	4 30	12 27	4	m
30 Fri.	11 37	6 37	5 0	8 32	6 36	6 48	4 49	8 49	6 19	7 1	4 36	9 9	6 1	7 16	4 21	9 31	5 37	1 34	5	m
																			6	m

Moon's phases

E.S.T.

d h m

13 10 52

21 3 1

28 8 0

C.S.T.

d h m

6 0 59

13 9 52

21 2 1

28 7 0

M.S.T.

d h m

5 11 59

13 8 52

21 1 1

28 6 0

P.S.T.

d h m

5 10 59

13 7 52

21 12 1

28 5 0

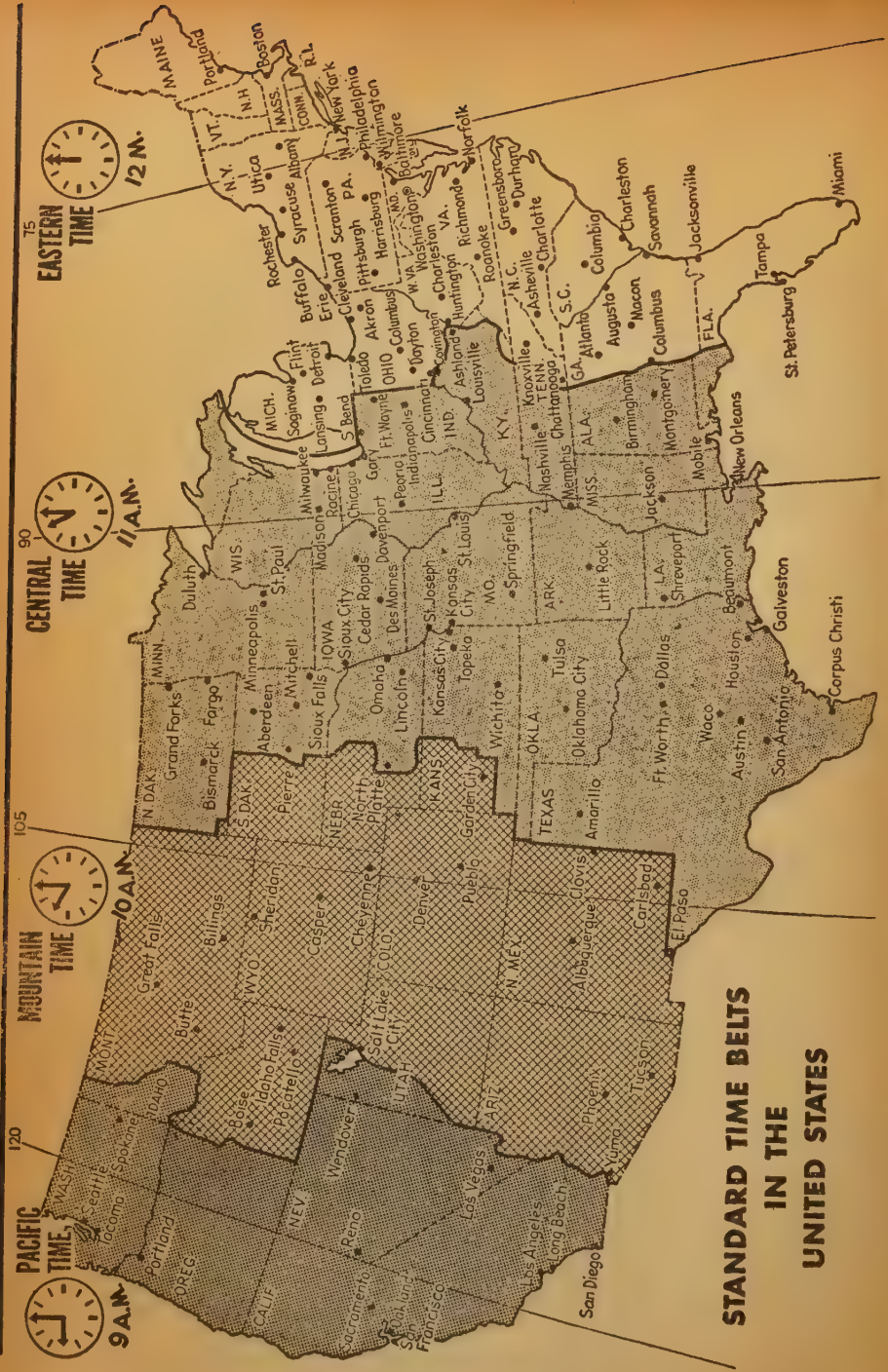
DECEMBER 1951

Dec.		LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's phases		E.S.T. d h m		C.S.T. d h m		M.S.T. d h m		P.S.T. d h m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		Sun fast		a- factor, moonrise		Sun- rise		Moon- rise		Sun- rise		Moon- rise		Sun- rise		Moon- rise												Moon's upper transit		a- factor, moonset																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
				90°	105°	120°	90°	105°	120°	90°	105°	120°	90°	105°	120°	90°	105°											120°	90°	105°	120°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1 Sat.	11 16	m	6 38	5 0	9 33	7 48	h	m	6 49	4 49	9 49	7 34	h	m	7 16	h	m	6 55	h	m	4 20	10 27	6 55	h	m	3 7	10	m	5 11 20	●	13 4 30	●	28 6 43	●	28 5 43	●	28 4 43	●	28 3 43	●																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
2 Sun.	10 53	2	6 38	5 0	10 25	9 1	6 50	4 48	10 38	8 48	7 3	4 36	10 54	8 35	7 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 20	11 10	8 18	4 2

Longitude, Latitude and Magnetic Declination of U. S. and Canadian Cities

The last column shows, in degrees, the magnetic declination, which is the angle that the magnetic meridian makes with the true, or geographic, meridian. When the value in degrees is marked w, the north end of the compass needle points west of true north by that number of degrees; when the value is e, the north end of the needle points east of true north by that many degrees.

City	Long.	Lat.	Dec.	City	Long.	Lat.	Dec.
	° ' "	° ' "	" "		° ' "	° ' "	" "
Eastport, Maine.....	67 0	44 54	21 w	Pierre, S. Dak.....	97 33	44 22	12 e
Bangor, Maine.....	68 47	44 48	19 w	Sioux Falls, S. Dak.....	96 44	43 33	11 e
Portland, Maine.....	70 15	43 40	17 w	Lincoln, Nebr.....	96 40	40 50	10 e
Manchester, N. H.....	71 30	43 0	16 w	North Platte, Nebr.....	100 46	41 8	12 e
Montpelier, Vt.....	72 32	44 15	16 w	Wichita, Kans.....	97 17	37 43	10 e
Boston, Mass.....	71 5	42 21	15 w	Garden City, Kans.....	100 53	37 58	13 e
Springfield, Mass.....	72 34	42 6	14 w	Oklahoma City, Okla.....	97 28	35 26	10 e
Providence, R. I.....	71 24	41 50	15 w	Amarillo, Tex.....	101 50	35 11	12 e
New Haven, Conn.....	72 55	41 19	12 w	Dallas, Tex.....	96 46	32 46	9 e
New York, N. Y.....	73 57½	40 48½	12 w	Sweetwater, Tex.....	100 24	32 28	11 e
Albany, N. Y.....	73 45	42 40	13 w	San Antonio, Tex.....	98 33	29 23	10 e
Watertown, N. Y.....	75 55	43 58	13 w	El Paso, Tex.....	106 29	31 46	13 e
Syracuse, N. Y.....	76 8	43 2	11 w	Havre, Mont.....	109 43	48 33	20 e
Buffalo, N. Y.....	78 50	42 55	7 w	Helena, Mont.....	112 2	46 35	19 e
Scranton, Pa.....	75 39	41 24	10 w	Lander, Wyo.....	108 40	42 50	17 e
Philadelphia, Pa.....	75 10	39 57	10 w	Cheyenne, Wyo.....	104 52	41 9	15 e
Pittsburgh, Pa.....	79 57	40 27	5 w	Denver, Colo.....	105 0	39 45	14 e
Atlantic City, N. J.....	74 25	39 22	10 w	Grand Junction, Colo.....	108 33	39 5	15 e
Baltimore, Md.....	76 38	39 18	8 w	Trinidad, Colo.....	104 30	37 10	14 e
Richmond, Va.....	77 29	37 33	6 w	Santa Fe, N. Mex.....	105 57	35 41	13 e
Roanoke, Va.....	79 57	37 17	3 w	Carlsbad, N. Mex.....	104 15	32 26	13 e
Charleston, W. Va.....	81 38	38 21	2 w	Silver City, N. Mex.....	108 18	32 46	14 e
Raleigh, N. C.....	78 39	35 46	4 w	Idaho Falls, Idaho.....	112 1	43 30	18 e
Charlotte, N. C.....	80 50	35 14	2 w	Salmon, Idaho.....	113 54	45 11	20 e
Wilmington, N. C.....	77 57	34 14	3 w	Lewiston, Idaho.....	117 2	46 24	21 e
Columbia, S. C.....	81 2	34 0	1 w	Boise, Idaho.....	116 13	43 36	19 e
Charleston, S. C.....	79 56	32 47	2 w	Salt Lake City, Utah.....	111 54	40 46	17 e
Atlanta, Ga.....	84 23	33 45	2 e	Richfield, Utah.....	112 5	38 46	17 e
Savannah, Ga.....	81 5	32 5	0	Flagstaff, Ariz.....	111 41	35 13	15 e
Jacksonville, Fla.....	81 40	30 22	1 e	Phoenix, Ariz.....	112 4	33 29	15 e
Tampa, Fla.....	82 27	27 57	2 e	Nogales, Ariz.....	110 56	31 21	14 e
Miami, Fla.....	80 12	25 46	1 e	Las Vegas, Nev.....	115 12	36 10	16 e
Key West, Fla.....	81 48	24 33	3 e	Elko, Nev.....	115 47	40 49	18 e
Sault Ste. Marie, Mich.....	84 21	46 30	4 w	Austin, Nev.....	117 4	39 29	18 e
Detroit, Mich.....	83 3	42 20	3 w	Reno, Nev.....	119 49	39 30	18 e
Grand Rapids, Mich.....	85 40	42 58	1 e	Spokane, Wash.....	117 26	47 40	23 e
Cleveland, Ohio.....	81 37	41 28	5 w	Yakima, Wash.....	120 33	46 34	22 e
Columbus, Ohio.....	83 1	40 0	2 w	Seattle, Wash.....	122 20	47 37	23 e
Cincinnati, Ohio.....	84 30	39 8	1 e	Hoquiam, Wash.....	123 54	46 59	23 e
Louisville, Ky.....	85 46	38 15	1 e	Portland, Oreg.....	122 41	45 31	23 e
Knoxville, Tenn.....	83 56	35 57	0	Eugene, Oreg.....	123 5	44 3	22 e
Nashville, Tenn.....	86 47	36 10	3 e	Baker, Oreg.....	117 50	44 47	21 e
Memphis, Tenn.....	90 3	35 9	6 e	Klamath Falls, Oreg.....	121 44	42 10	19 e
Birmingham, Ala.....	86 50	33 30	3 e	Sacramento, Calif.....	121 30	38 35	17 e
Montgomery, Ala.....	86 18	32 21	3 e	San Francisco, Calif.....	122 26	37 47	18 e
Mobile, Ala.....	88 3	30 42	5 e	Fresno, Calif.....	119 48	36 44	17 e
Jackson, Miss.....	90 12	32 20	7 e	Los Angeles, Calif.....	118 15	34 3	16 e
Indianapolis, Ind.....	86 10	39 46	1 e	Needles, Calif.....	114 36	34 50	15 e
Milwaukee, Wis.....	87 55	43 2	2 e	San Diego, Calif.....	117 10	32 42	15 e
Chicago, Ill.....	87 37	41 50	2 e	El Centro, Calif.....	115 33	32 48	15 e
Springfield, Ill.....	89 38	39 48	4 e	St. John, N. B.....	66 10	45 18	22 w
Duluth, Minn.....	92 5	46 49	7 e	Quebec, Que.....	71 11	46 49	20 w
Minneapolis, Minn.....	93 14	44 59	7 e	Montreal, Que.....	73 35	45 30	16 w
Dubuque, Iowa.....	90 40	42 31	5 e	Ottawa, Ont.....	75 43	45 24	14 w
Des Moines, Iowa.....	93 37	41 35	7 e	Kingston, Ont.....	76 30	44 15	12 w
Kansas City, Mo.....	94 35	39 6	9 e	Toronto, Ont.....	79 24	43 40	8 w
St. Louis, Mo.....	90 12	38 35	5 e	London, Ont.....	81 34	43 2	5 w
Springfield, Mo.....	93 17	37 13	7 e	Port Arthur, Ont.....	89 17	48 30	1 e
Hot Springs, Ark.....	93 3	34 31	8 e	Winnipeg, Man.....	97 7	49 54	11 e
Shreveport, La.....	93 42	32 28	8 e	Moose Jaw, Sask.....	105 31	50 37	18 e
New Orleans, La.....	90 4	29 57	6 e	Calgary, Alta.....	114 1	51 1	23 e
Fargo, N. Dak.....	96 48	46 52	10 e	Nelson, B. C.....	117 17	49 30	23 e
Bismarck, N. Dak.....	100 47	46 48	14 e	Victoria, B. C.....	123 21	48 25	24 e



STANDARD TIME BELTS IN THE UNITED STATES

Longitude and Latitude of Foreign Cities—by Continents— and Time of Day Corresponding to 12:00 Noon, E.S.T.

City	Time	Long.	Lat.	City	Time	Long.	Lat.
		° ' "	° ' "			° ' "	° ' "
Nome, Alaska.....	6:00 a.m.	165 30 w	64 25 n	Munich, Germany.....	6:00 p.m.	11 35 e	48 8 n
Sitka, Alaska.....	9:00 a.m.	135 15 w	57 10 n	Zürich, Switzerland.....	6:00 p.m.	8 31 e	47 21 n
Honolulu, Hawaii.....	7:00 a.m.	157 50 w	21 18 n	Milan, Italy.....	6:00 p.m.	9 10 e	45 27 n
Chihuahua, Mexico.....	11:00 a.m.	106 5 w	28 37 n	Venice, Italy.....	6:00 p.m.	12 20 e	45 26 n
Mexico City, Mexico.....	11:00 a.m.	99 7 w	19 26 n	Rome, Italy.....	6:00 p.m.	12 27 e	41 54 n
Veracruz, Mexico.....	11:00 a.m.	96 10 w	19 10 n	Naples, Italy.....	6:00 p.m.	14 15 e	40 50 n
Panamá City, Panamá.....	12:00 noon	79 32 w	8 58 n	Warsaw, Poland.....	6:00 p.m.	21 0 e	52 14 n
Havana, Cuba.....	12:00 noon	82 23 w	23 8 n	Prague, Czechoslovakia.....	6:00 p.m.	14 26 e	50 5 n
Kingston, Jamaica.....	12:00 noon	76 49 w	17 59 n	Vienna, Austria.....	6:00 p.m.	16 20 e	48 14 n
San Juan, Puerto Rico.....	1:00 p.m.	66 10 w	18 30 n	Budapest, Hungary.....	6:00 p.m.	19 5 e	47 30 n
Bogotá, Colombia.....	12:00 noon	74 15 w	4 32 n	Belgrade, Yugoslavia.....	6:00 p.m.	20 32 e	44 52 n
Caracas, Venezuela.....	12:30 p.m.	67 2 w	10 28 n	Bucharest, Rumania.....	7:00 p.m.	26 7 e	44 25 n
Georgetown, British Guiana.....	1:30 p.m.	58 15 w	6 45 n	Sofia, Bulgaria.....	7:00 p.m.	23 20 e	42 40 n
Paramaribo, Surinam.....	1:30 p.m.	55 15 w	5 45 n	Athens, Greece.....	7:00 p.m.	23 43 e	37 58 n
Cayenne, French Guiana.....	1:30 p.m.	52 18 w	4 49 n	Leningrad, U.S.S.R.....	7:00 p.m.	30 18 e	59 56 n
Guayaquil, Ecuador.....	12:00 noon	79 56 w	2 10 s	Moscow, U.S.S.R.....	7:00 p.m.	37 36 e	55 45 n
Lima, Peru.....	12:00 noon	77 2 w	12 0 s	Saratov, U.S.S.R.....	8:00 p.m.	46 0 e	51 31 n
Belém, Brazil.....	2:00 p.m.	48 29 w	1 28 s	Odesa, U.S.S.R.....	7:00 p.m.	30 48 e	46 27 n
São Salvador, Brazil.....	2:00 p.m.	38 27 w	12 56 s	Algiers, Algeria.....	5:00 p.m.	3 0 e	36 50 n
Rio de Janeiro, Brazil.....	2:00 p.m.	43 12 w	22 57 s	Tripoli, Libya.....	6:00 p.m.	13 12 e	32 57 n
São Paulo, Brazil.....	2:00 p.m.	46 31 w	23 31 s	Cairo, Egypt.....	7:00 p.m.	31 21 e	30 2 n
La Paz, Bolivia.....	1:00 p.m.	68 22 w	16 27 s	Dakar, French West Africa.....	4:00 p.m.	17 28 w	14 40 n
Asunción, Paraguay.....	1:00 p.m.	57 40 w	25 15 s	Léopoldville, Belgian Congo.....	6:00 p.m.	15 17 e	4 18 s
Montevideo, Uruguay.....	1:30 p.m.	56 10 w	34 53 s	Addis Ababa, Ethiopia.....	8:00 p.m.	38 49 e	9 2 n
Iquique, Chile.....	1:00 p.m.	70 7 w	20 10 s	Nairobi, Kenya.....	8:00 p.m.	36 55 e	1 25 n
Santiago, Chile.....	1:00 p.m.	70 45 w	33 28 s	Johannesburg, U. of S. Af.....	7:00 p.m.	28 4 e	26 12 s
Córdoba, Argentina.....	1:00 p.m.	64 10 w	31 28 s	Durban, U. of S. Af.....	7:00 p.m.	30 53 e	29 53 s
Buenos Aires, Argentina.....	1:00 p.m.	58 22 w	34 35 s	Capetown, U. of S. Af.....	7:00 p.m.	18 22 e	33 55 s
Reykjavik, Iceland.....	4:00 p.m.	21 58 w	64 4 n	Tananarive, Madagascar.....	8:00 p.m.	47 33 e	18 50 s
Belfast, Northern Ireland.....	5:00 p.m.	5 56 w	54 37 n	Irkutsk, U.S.S.R.....	0:00 a.m.*	104 20 e	52 30 n
Dublin, Ireland.....	5:00 p.m.	6 15 w	53 20 n	Vladivostok, U.S.S.R.....	2:00 a.m.*	132 0 e	43 10 n
Aberdeen, Scotland.....	5:00 p.m.	2 9 w	57 9 n	Peiping, China.....	1:00 a.m.*	116 25 e	39 55 n
Edinburgh, Scotland.....	5:00 p.m.	3 10 w	55 55 n	Nanking, China.....	1:00 a.m.*	118 53 e	32 3 n
Glasgow, Scotland.....	5:00 p.m.	4 15 w	55 50 n	Shanghai, China.....	1:00 a.m.*	121 28 e	31 10 n
Newcastle-on-Tyne, Eng.....	5:00 p.m.	1 37 w	54 58 n	Chungking, China.....	0:00 a.m.*	106 34 e	29 46 n
Leeds, England.....	5:00 p.m.	1 30 w	53 45 n	Canton, China.....	1:00 a.m.*	113 15 e	23 7 n
Manchester, England.....	5:00 p.m.	2 15 w	53 30 n	Manila, Philippines.....	1:00 a.m.*	120 57 e	14 35 n
Liverpool, England.....	5:00 p.m.	3 0 w	53 25 n	Bangkok, Thailand.....	0:00 a.m.*	100 30 e	13 45 n
Birmingham, England.....	5:00 p.m.	1 55 w	52 25 n	Singapore, British Malaya.....	0:30 a.m.*	103 55 e	1 14 n
London, England.....	5:00 p.m.	0 5 w	51 32 n	Rangoon, Burma.....	11:30 p.m.	96 0 e	16 50 n
Bristol, England.....	5:00 p.m.	2 35 w	51 28 n	Calcutta, India.....	10:30 p.m.	88 24 e	22 34 n
Plymouth, England.....	5:00 p.m.	4 5 w	50 25 n	Bombay, India.....	10:30 p.m.	72 48 e	19 0 n
Hammerfest, Norway.....	6:00 p.m.	23 38 e	70 38 n	Mecca, Saudi Arabia.....	8:00 p.m.	39 45 e	21 29 n
Oslo, Norway.....	6:00 p.m.	10 42 e	59 57 n	Ankara, Turkey.....	7:00 p.m.	32 55 e	39 55 n
Stockholm, Sweden.....	6:00 p.m.	18 3 e	59 17 n	Tokyo, Japan.....	2:00 a.m.*	139 45 e	35 40 n
Helsinki, Finland.....	7:00 p.m.	25 0 e	60 10 n	Nagoya, Japan.....	2:00 a.m.*	136 56 e	35 7 n
Copenhagen, Denmark.....	6:00 p.m.	12 34 e	55 40 n	Osaka, Japan.....	2:00 a.m.*	135 30 e	34 32 n
Lisbon, Portugal.....	5:00 p.m.	9 9 w	38 44 n	Nagasaki, Japan.....	2:00 a.m.*	129 57 e	32 48 n
Madrid, Spain.....	5:00 p.m.	3 42 w	40 26 n	Darwin, Australia.....	2:30 a.m.*	130 51 e	12 28 s
Barcelona, Spain.....	5:00 p.m.	2 9 e	41 23 n	Brisbane, Australia.....	3:00 a.m.*	153 8 e	27 29 s
Marseille, France.....	5:00 p.m.	5 20 e	43 20 n	Sydney, Australia.....	3:00 a.m.*	151 0 e	34 0 s
Bordeaux, France.....	5:00 p.m.	0 31 w	44 50 n	Melbourne, Australia.....	3:00 a.m.*	144 58 e	37 47 s
Lyon, France.....	5:00 p.m.	4 50 e	45 45 n	Adelaide, Australia.....	2:30 a.m.*	138 36 e	34 55 s
Paris, France.....	5:00 p.m.	2 20 e	48 48 n	Perth, Australia.....	1:00 a.m.*	115 52 e	31 57 s
Brussels, Belgium.....	5:00 p.m.	4 22 e	50 52 n	Hobart, Tasmania.....	3:00 a.m.*	147 19 e	42 52 s
Amsterdam, Netherlands.....	5:00 p.m.	4 53 e	52 22 n	Auckland, New Zealand.....	5:00 a.m.*	174 45 e	36 52 s
Bremen, Germany.....	6:00 p.m.	8 49 e	53 5 n	Wellington, New Zealand.....	5:00 a.m.*	174 47 e	41 17 s
Hamburg, Germany.....	6:00 p.m.	10 2 e	53 33 n	Jakarta, Java.....	1:00 a.m.*	106 48 e	6 16 s
Berlin, Germany.....	6:00 p.m.	13 25 e	52 30 n	Makassar, Celebes.....	1:00 a.m.*	119 30 e	5 9 s
Frankfurt, Germany.....	6:00 p.m.	8 41 e	50 7 n	Port Moresby, Papua Ter.....	3:00 a.m.*	147 8 e	9 25 s

* On the following day.

The World Calendar

FIRST QUARTER

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3		4	5	6	7			1	2	3	4						1	2
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30

SECOND QUARTER

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
																				W*

THIRD QUARTER

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30

FOURTH QUARTER

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
																				W†

* The Leap-Year World Holiday, W or June 31 (an extra day), follows June 30 in leap years only.
† The Year-End World Holiday, W or December 31 (365th day), follows December 30 every year.

Exposition

The perpetual World Calendar divides the year into equal quarters of 91 days, or thirteen weeks, or three months, or approximately one season. The first month in each quarter contains 31 days. The other two months have 30 days each, every month having twenty-six weekdays plus Sundays. Every quarter with its monthly arrangement of 31-30-30 days begins on a Sunday, the first day of the week, and ends on a Saturday, the seventh day of the week, which is easy for business, accountants and educators because the closing

day of every quarter does not fall on a Sunday. Every year begins logically on the accepted first day of the week, a Sunday, January 1. This plan retains the customary arrangement of weekdays.

The 364-day year is not complete however. The 365th day of the year, essential in keeping the calendar in step with the seasons, is the logical Year-End World Holiday, dated W or December 31, that follows Saturday, December 30, every year. By giving the 365th day, the Year-End World Holiday, a name and date, a blank

date is avoided. This World Holiday is an integral part of the year; it belongs to and completes the calendar.

The extra day in leap years is the Leap-Year World Holiday, dated W or June 31, and follows Saturday, June 30. By placing these two stabilizing days, the Leap-Year World Holiday in leap years at the end of the second quarter and the Year-End World Holiday every year at the end of the fourth

quarter, the calendar in leap years becomes balanced, each half-year having 183 days. The calendar is thus a stable, balanced, well-coordinated time system.

Seventeen nations have already approved the World Calendar, including Afghanistan, Brazil, Chile, China, Czechoslovakia, Estonia, Greece, Hungary, Mexico, Norway, Panamá, Peru, Saudi Arabia, Spain, Syria, Turkey and Uruguay.

Perpetual Calendar

1800—2000 A. D.

Day of the month	Jan. Oct.	Apr. Jul. Jan.	Sept. Dec.	Jun.	Feb. Mar. Nov.	Aug. Feb.	May	
1 8 15 22 29.....	A	B	C	D	E	F	G	Mon.
2 9 16 23 30.....	G	A	B	C	D	E	F	Tue.
3 10 17 24 31.....	F	G	A	B	C	D	E	Wed.
4 11 18 25.....	E	F	G	A	B	C	D	Thur.
5 12 19 26.....	D	E	F	G	A	B	C	Fri.
6 13 20 27.....	C	D	E	F	G	A	B	Sat.
7 14 21 28.....	B	C	D	E	F	G	A	Sun.
EXAMPLES								
(1) Given Nov. 20, 1891, to find the day of the week. Under Nov., opposite 20, is G. In the 1891 column, opposite G is Fri., <i>ans.</i>								
(2) Given Fri., Oct. —, 1868, to find the possible days of the month. In the 1868 column, opposite Fri. is G. Under Oct., G gives 2, 9, 16, 23, 30, <i>ans.</i> , the Fridays of Oct., 1868.								
(3) Given Mon., —, 5, 1811, to find the possible months. In the 1811 column, opposite Mon. is B. Opposite 5, B gives Aug., the only common-year month available, <i>ans.</i>								
(4) Given Sat., Feb. 29, —, to find the possible years. Under Feb., leap-year, opposite 29, is F. Opposite Sat. F gives leap-years 1812, 1840, 1868, 1896, etc., <i>ans.</i>								
NOTE: In leap-years, use the Jan. and Feb. in italics, but do not use these for common years.								
	.....	.....	1800	1801	1802	1803	.....
	1804	1805	1806	1807	.....	1808	1809	
	1810	1811	.....	1812	1813	1814	1815	
	.....	1816	1817	1818	1819	.....	1820	
	1821	1822	1823	.....	1824	1825	1826	
	1827	.....	1828	1829	1830	1831	.....
	1832	1833	1834	1835	.....	1836	1837	
	1838	1839	.....	1840	1841	1842	1843	
	.....	1844	1845	1846	1847	.....	1848	
	1849	1850	1851	.....	1852	1853	1854	
	1855	.....	1856	1857	1858	1859	.....
	1860	1861	1862	1863	.....	1864	1865	
	1866	1867	.....	1868	1869	1870	1871	
	.....	1872	1873	1874	1875	.....	1876	
	1877	1878	1879	.....	1880	1881	1882	
	1883	.....	1884	1885	1886	1887	.....
	1888	1889	1890	1891	.....	1892	1893	
	1894	1895	.....	1896	1897	1898	1899	
	1900	1901	1902	1903	.....	1904	1905	
	1906	1907	.....	1908	1909	1910	1911	
	.....	1912	1913	1914	1915	.....	1916	
	1917	1918	1919	.....	1920	1921	1922	
	1923	.....	1924	1925	1926	1927	.....
	1928	1929	1930	1931	.....	1932	1933	
	1934	1935	.....	1936	1937	1938	1939	
	.....	1940	1941	1942	1943	.....	1944	
	1945	1946	1947	.....	1948	1949	1950	
	1951	.....	1952	1953	1954	1955	.....
	1956	1957	1958	1959	.....	1960	1961	
	1962	1963	.....	1964	1965	1966	1967	
	.....	1968	1969	1970	1971	.....	1972	
	1973	1974	1975	.....	1976	1977	1978	
	1979	.....	1980	1981	1982	1983	.....
	1984	1985	1986	1987	.....	1988	1989	
	1990	1991	.....	1992	1993	1994	1995	
	.....	1996	1997	1998	1999	.....	2000	

1950 JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	—	—	—	1	2	3	4	—	—	—	1	2	3	4	—	—	—	—	—	—	1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	—	—	—	—	26	27	28	—	—	—	—	26	27	28	29	30	31	—	23/29	24	25	26	27	28	29
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	4	5	6	—	—	—	1	2	3	—	—	—	1	2	3	4	5	—	—	—	—	—	—	1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31	—	—	—	25	26	27	28	29	30	—	23/30	24/31	25	26	27	28	29	27	28	29	30	31	—	—
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	1	2	1	2	3	4	5	6	7	—	—	—	1	2	3	4	—	—	—	—	—	—	1
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31	—	—	—	—	26	27	28	29	30	—	—	24/31	25	26	27	28	29	30

1951 JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	4	5	6	—	—	—	—	1	2	3	—	—	—	—	1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31	—	—	—	25	26	27	28	—	—	—	25	26	27	28	29	30	31
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	—	—	1	2	3	4	5	—	—	—	—	—	1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30	—	—	—	—	—	27	28	29	30	31	—	—	24	25	26	27	28	29	30
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	—	—	—	1	2	3	4	—	—	—	—	—	—	1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	—	—	—	—	26	27	28	29	30	31	—	23/30	24	25	26	27	28	29
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	4	5	6	—	—	—	—	1	2	3	—	—	—	—	—	—	1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31	—	—	—	25	26	27	28	29	30	—	23/30	24/31	25	26	27	28	29

1952 JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	1	2	3	4	5	—	—	—	1	2	3	—	—	—	1	2	3	4	5	—	—	—	—	—	—	1
6	7	8	9	10	11	12	3	4	5	6	7	8	9	2	3	4	5	6	7	8	6	7	8	9	10	11	12
13	14	15	16	17	18	19	10	11	12	13	14	15	16	9	10	11	12	13	14	15	13	14	15	16	17	18	
20	21	22	23	24	25	26	17	18	19	20	21	22	23	16	17	18	19	20	21	22	20	21	22	23	24	25	
27	28	29	30	31	—	—	24	25	26	27	28	29	—	23/30	24/31	25	26	27	28	29	27	28	29	30	—	—	
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	1	2	3	—	—	—	1	2	3	—	—	—	1	2	3	4	5	—	—	—	—	—	—	1
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	
25	26	27	28	29	30	31	29	30	—	—	—	—	—	27	28	29	30	31	—	—	24/31	25	26	27	28	29	
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	4	5	6	—	—	—	1	2	3	4	—	—	—	1	2	3	4	—	—	—	—	—	—	1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	
28	29	30	—	—	—	—	26	27	28	29	30	31	—	23/30	24	25	26	27	28	29	28	29	30	31	—	—	

Astronomical Data

The Sun

There are countless millions of far distant, superheated, self-luminous gaseous bodies called stars and each one is in itself a sun. Our Sun—the star around which our whole solar system revolves—is at a mean distance of 93,003,000 miles from the Earth, has a diameter of 865,390 miles, a surface temperature of about 11,000° F. and an interior temperature estimated at millions of degrees. It has a surface area approximately 12,000 times that of the Earth and in volume or bulk it is about 1,306,000 times the size of the Earth. It is, nevertheless, a star of only average size and temperature.

The Sun rotates on its axis and, by observation of Sun-spots (great whirling storms in the Sun's atmosphere) and Faculae (bright streaks or areas on the Sun's surface), astronomers have discovered that the rotational speed varies from approximately 24½ days at its equator to approximately 34 days near its poles. The Sun is just one star of the great Milky Way Galaxy that is rotating on its galactic axis at a rate that gives the Sun a galactic

traveling speed of 175 miles per second. Furthermore, the Sun is moving toward a point known as "the apex of the Sun's way" in the constellation Hercules at a speed of about 12 miles per second.

What we see when we look at the Sun is the glowing surface called the Photosphere. Extending above this surface is the Sun's atmosphere consisting of two layers, one extending outward for a few hundred miles from the Sun's surface and called the Reversing Layer for spectroscopic reasons, the other an outer layer extending several thousand miles and called the Chromosphere because of its reddish color due mostly to superheated hydrogen, helium and calcium. Solar "prominences" occasionally burst out from this layer and extend hundreds of thousands of miles above the Sun's surface. Beyond these layers of solar atmosphere and extending to great height is the outermost observable solar feature, the magnificent Corona of exceedingly slight density that provides an awesome spectacle for observers during total eclipses of the Sun.

Morning and Evening Stars in 1951

MERCURY

Morning star, Jan. 1 to Mar. 11
Evening star, Mar. 11 to Apr. 24
Morning star, Apr. 24 to June 25
Evening star, June 25 to Aug. 31
Morning star, Aug. 31 to Oct. 13
Evening star, Oct. 13 to Dec. 16
Morning star, Dec. 16 to Dec. 31

VENUS

Evening star, Jan. 1 to Sept. 3
Morning star, Sept. 3 to Dec. 31

MARS

Evening star, Jan. 1 to May 22
Morning star, May 22 to Dec. 31

JUPITER

Evening star, Jan. 1 to Mar. 11
Morning star, Mar. 11 to Oct. 2
Evening star, Oct. 2 to Dec. 31

SATURN

Morning star, Jan. 1 to Mar. 20
Evening star, Mar. 20 to Sept. 29
Morning star, Sept. 29 to Dec. 31

Mercury may be seen over the western horizon after sunset for about 10 days before and after each eastern elongation, and similarly over the eastern horizon before sunrise around western elongations. Our phenomena section gives elongation times. At the Jan. elongation Mercury is in Sagittarius, n.w. of the dipper; at the Apr. elongation, in Aries s. of Alpha; at the May elongation, in the n.w. corner of Cetus; at the Aug. and Sept. elongations, in Leo, s. and e. of Regulus; at the Nov. elongation, at the w. edge of Sagittarius.

Venus is visible in the west for many weeks around eastern elongation, and in the east around western elongation. Locations are: in Jan. in n. Sagittarius and crossing Capricornus into Aquarius; Feb. in Aquarius and s. Pisces; Mar. in Pisces and Aries; Apr. in Aries and Taurus; May

in Taurus and Gemini going to a point s. of Pollux; June in Gemini, Cancer and w. Leo (n.w. of Regulus); July in s. Leo passing just n. of Regulus July 7; Aug. in s. Leo and Sextans; Sept. in Sextans; Oct. in Sextans and s. Leo; Nov. crossing Virgo to point n. of Spica; Dec. in e. Virgo to e. Libra.

Mars is not retrograde in 1951. Positions are: Jan.-Mar., Capricornus, Aquarius, Pisces; Apr.-June, Pisces, Aries, Taurus; July-Sept., Taurus, Gemini, Cancer, Leo; Oct.-Dec., Leo and Virgo.

Jupiter is in Aquarius, Jan.-Mar.; in Pisces, Mar.-Sept.; in Cetus near Pisces in Oct.; in s. Pisces, Nov.-Dec. It goes retro, Aug.-Dec.

Saturn is retro in w. Virgo, Jan.-July; goes direct in w. Virgo, July-Dec. Early in Nov. it passes just s. of Gamma Virginis.

The Brightest Stars

Star	Constellation	Position, 1950			Mag.	Dist.	On meridian 9 p.m.
		R.A.	Dec.				
		h m °	' "			l-y.	
Sirius.....	Canis Major.....	6 42.9	-16 39	-1.6	8	Feb. 16	
Canopus.....	Carina.....	6 22.8	-52 40	-0.9	650	Feb. 11	
Alpha Centauri.....	Centaurus.....	14 36.2	-60 38	+0.1	4	June 16	
Vega.....	Lyra.....	18 35.2	+38 44	0.1	23	Aug. 15	
Capella.....	Auriga.....	5 13.0	+45 57	0.2	42	Jan. 24	
Arcturus.....	Boötes.....	14 13.4	+19 27	0.2	32	June 10	
Rigel.....	Orion.....	5 12.1	- 8 15	0.3	545	Jan. 24	
Procyon.....	Canis Minor.....	7 36.7	+ 5 21	0.5	10	Mar. 2	
Achernar.....	Eridanus.....	1 35.9	-57 29	0.6	70	Nov. 30	
Beta Centauri.....	Centaurus.....	14 0.3	-60 8	0.9	130	June 7	
Altair.....	Aquila.....	19 48.3	+ 8 44	0.9	18	Sept. 3	
Betelgeuse.....	Orion.....	5 52.5	+ 7 24	0.9	300	Feb. 3	
Aldebaran.....	Taurus.....	4 33.0	+16 25	1.1	54	Jan. 14	
Spica.....	Virgo.....	13 22.6	-10 54	1.2	190	May 28	
Pollux.....	Gemini.....	7 42.3	+28 9	1.2	31	Mar. 3	
Antares.....	Scorpius.....	16 26.3	-26 19	1.2	170	July 14	
Fomalhaut.....	Piscis Austrinus.....	22 54.9	-29 53	1.3	27	Oct. 20	
Deneb.....	Cygnus.....	20 39.7	+45 6	1.3	465	Sept. 16	
Regulus.....	Leo.....	10 5.7	+12 13	1.3	70	Apr. 9	
Beta Crucis.....	Crux.....	12 44.8	-59 25	1.5	465	May 18	
Eta Carinae.....	Carina.....	10 43.1	-59 25	1-7	...	Apr. 17	
Alpha-one Crucis.....	Crux.....	12 23.8	-62 49	1.6	150	May 13	
Castor.....	Gemini.....	7 31.4	+32 0	1.6	44	Feb. 28	
Gamma Crucis.....	Crux.....	12 28.4	-56 50	1.6	...	May 15	
Epsilon Canis Majoris.....	Canis Major.....	6 56.7	-28 54	1.6	325	Feb. 19	
Epsilon Ursae Majoris.....	Ursa Major.....	12 51.8	+56 14	1.7	50	May 20	
Bellatrix.....	Orion.....	5 22.4	+ 6 18	1.7	215	Jan. 27	
Lambda Scorpii.....	Scorpius.....	17 30.2	-37 4	1.7	205	July 30	
Epsilon Carinae.....	Carina.....	8 21.5	-59 21	1.7	325	Mar. 13	
Mira.....	Cetus.....	2 16.8	- 3 12	2-9	250	Dec. 11	
Epsilon Orionis.....	Orion.....	5 33.7	- 1 14	1.7	405	Jan. 29	
Beta Tauri.....	Taurus.....	5 23.1	+28 34	1.8	115	Jan. 27	
Beta Carinae.....	Carina.....	9 12.7	-69 31	1.8	...	Mar. 26	
Alpha Trianguli Australis.....	Triangulum Australe.....	16 43.4	-68 56	1.9	130	July 18	
Alpha Persei.....	Perseus.....	3 20.7	+49 41	1.9	190	Dec. 27	
Eta Ursae Majoris.....	Ursa Major.....	13 45.6	+49 34	1.9	220	June 3	
Gamma Geminorum.....	Gemini.....	6 34.8	+16 27	1.9	65	Feb. 14	
Epsilon Sagittarii.....	Sagittarius.....	18 20.9	-34 25	1.9	165	Aug. 12	
Alpha Ursae Majoris.....	Ursa Major.....	11 0.7	+62 1	1.9	90	Apr. 22	
Delta Canis Majoris.....	Canis Major.....	7 6.4	-26 19	2.0	410	Feb. 22	

Comets

In ancient times comets were supposed to be omens of sudden death, war, revolution or other dire events in human affairs and practically nothing was known of their true nature. They still offer puzzling problems to modern astronomers and, with about 1000 listed, new ones are being discovered and charted each year. In general, comets consist of a nucleus (sometimes lacking) surrounded by a head or "coma" (from the Greek word for hair because of its hazy appearance) from which extends the great tail that makes the passage of a comet through our skies such a striking spectacle. Comets come in varying sizes but the average diameter of the heads of a large number of observed comets is about

80,000 miles, and the tail length may stretch out to more than 100,000,000 miles. The density of comets is so low, however, that we can see the stars through them and there is more actual material in one cubic inch of ordinary air than in 2000 cubic miles of the tail of a comet.

The luminous tails of comets were believed, for many centuries, to be merely clouds high in our atmosphere. Tycho Brahe, eccentric Danish astronomer, proved that the comet he observed in 1577 was a celestial object far beyond the limit of the Earth's atmosphere. But the great forward step in the study of comets came when Edmund Halley, who became England's Astronomer Royal, carefully observed a

comet in 1682, checked with previous observations, calculated its orbit and predicted its return to our skies in 1758 or 1759. Halley died in 1742 but the comet, now named after him, reappeared on schedule and a search through ancient records indicated that it had been observed in repeated appearances as far back as 240 B.C. Its last appearance was marked by its perihelion passage in 1910 and its next visit to our skies will occur in 1986. Halley's fulfilled prediction was the first definite proof that comets have regular orbits and time schedules or are, as the astronomers say, "periodic". The known "periods" (time intervals between appearances) of comets vary from the 3.3 years of Encke's Comet to thousands of years for wider travelers. No known great comets are scheduled for appearance in our sky this year.

A curious thing about comets is that their tails always trail from the head in a direction away from the Sun, so that when a comet is moving away from the Sun, the tail stretches out in front of the head. A comet's tail is so tenuous as to be almost a vacuum. The Earth passed through the tail of Halley's Comet in May, 1910, and on that occasion astronomers heard nothing,

felt nothing and saw nothing to indicate that such passage had any observable effect on the Earth.

Twenty Famous Comets

Year and no.	Name of comet	Period
		years
1744	De Chéseaux's Comet.....	.....
1806	Biela's Comet.....	6.7
1811 I	Great Comet of 1811.....	3000
1812	Di Vico's Comet.....	70.7
1815	Olbers' Comet.....	74.0
1819 I	Encke's Comet.....	3.3
1819	Pons-Winnecke Comet.....	6.0
1835 III	Halley's Comet.....	76.3
1843 I	Great Comet of 1843.....	512.4
1844 II	Great Comet of 1844.....	102,050
1858 VI	Donati's Comet.....	2,040 (I)
1864 II	Great Comet of 1864.....	2,800,000
1871 III	Tuttle's Comet.....	13.8
1874 III	Coggia's Comet.....	6,000 (I)
1879	Brorsen's Comet.....	5.6
1881 II	Tebbutt's Comet.....	.....
1889 VI	Swift's 2nd Comet.....	7.0
1892 III	Holmes' Comet.....	6.9
1923	d'Arrest's Comet.....	6.6
1925 II	Comet Schwassmann-Wachmann..	16.2

The Polar Auroras

It has been definitely established that Sun-spots are the direct cause of the greatest electrical show on Earth, a double feature, the Aurora Borealis (Northern Lights) and the Aurora Australis (Southern Lights). Sun-spots are magnetic storms of vast dimensions on the surface of the Sun and they shoot out electrified particles into space. Those that come toward the Earth are drawn toward the Earth's magnetic poles and consequently these magnetic poles are the radiating centers of those spectacular electromagnetic displays in the sky that we commonly call the "Northern Lights" or the "Southern Lights", depending upon whether we see them in the northern or southern hemisphere. The electrical particles from the Sun-spots strike the upper regions of our atmosphere where the component gases (nitrogen, oxygen and extremely minor amounts of argon, helium, neon, hydrogen and carbon dioxide) are very much rarefied and cause them to vibrate and glow in colors characteristic of the various elements, just as a neon sign glows when an electric charge is passed through it. The Sun-spots that cause auroral displays also cause the magnetic storms that interfere

with radio reception, telephone, telegraph and cable traffic and other electromagnetic devices such as compasses and various aviation accessories.

There is an almost infinite variety to the auroral display. The lights may sweep across the sky in waves, in streamers or in folds like draped curtains. Or it may be a stationary glow. Sometimes there is little or no color in these waves, sheets or streamers of light. At other times the lights may be rich in red or green or pastel shades. Rose color and lavender and violet and purple are common. Blue is rare but has been seen. The "Northern Lights" have been seen as far south as New Orleans and the Florida peninsula and the "Southern Lights" have been seen as far north as New Zealand and Australia, but the maximum occurrence of these auroral displays is along the borders of the Arctic and Antarctic regions. Since these are atmospheric displays, our atmosphere must extend to the extreme height at which auroral lights are observed. Prof. Carl Störmer of the University of Oslo found this to be about 600 miles. He further found that no auroral lights came closer to the Earth's surface than 50 or 60 miles.

The Change of Seasons

It is enough to state that the Earth is nearer to the Sun in January than it is in July to convince those who live in the northern hemisphere that there must be some other explanation than that for the

seasonal changes on our globe. The reason for the change in seasons is that the axis of rotation of the Earth is tipped to the perpendicular of the plane of its orbit around the sun at an angle of approxi-

mately $23\frac{1}{2}$ degrees (more accurately, it varies in 1951 from $23^{\circ} 26' 51''.6$ to $23^{\circ} 26' 53''.8$) and consequently there is a proportional shifting of the angle of the Sun's rays falling on different portions of the Earth's surface at different times of year.

On or about June 21 the north end of the Earth's axis is tipped to its limit toward the Sun. In the northern hemisphere this is our Summer Solstice. We then have our longest days and receive a maximum of heat and light from the Sun whose perpendicular rays are falling on the Tropic of Cancer, $23\frac{1}{2}$ degrees north of the Equator. Six months later, on or about Dec. 21, the Earth has reached a position in its orbit that finds the north end of its axis tipped at its maximum away from the Sun. This is our Winter Solstice. We then have our shortest days and receive a minimum of heat and light from the Sun that is hovering over the Tropic of

Capricorn, $23\frac{1}{2}$ degrees south of the Equator. Conditions are reversed in the southern hemisphere for obvious reasons. Their Winter is our Summer; their Summer our Winter. Twice a year, at the equinoxes in March and September, the Sun is on the Equator, the day is of equal length all over the world and each hemisphere receives the same amount of light and heat from the rays of the Sun.

If the effect in the change of the angle of the Sun's rays on the Earth's surface were instantaneous, our coldest period would be at the Winter Solstice and our warmest period at the Summer Solstice, but due to the blanket of atmosphere around the Earth and the cumulative effect in the heating or cooling of the Earth's surface, we have "the lag of the seasons" that brings our warmest and coldest periods some five or six weeks after the Sun is "farthest north" or "farthest south".

The Seasons, 1951

(Eastern Standard Time)

d h m

Mar. 21	5 26	A.M.	Sun enters sign of Aries; spring begins in n. hemisphere
June 22	0 25	A.M.	Sun enters sign of Cancer; summer begins in n. hemisphere
Sept. 23	3 38	P.M.	Sun enters sign of Libra; autumn begins in n. hemisphere
Dec. 22	11 1	A.M.	Sun enters sign of Capricornus; winter begins in n. hemisphere

Planet Table

	Mean distance from sun in millions of miles	Period of revolution around the sun	Eccentricity of orbit	Inclination to ecliptic	Diameter	Period of rotation on axis	Inclination of equator to orbit plane	Surface gravity (earth = 1)	Oblateness	Mean velocity in orbit	Max. stellar mag.
				° ' "	miles		°			mi./sec.	
Sun.....					865,390	244.64†	7.2	28	0	.....	-26.7
Moon.....		(274.322)*	0.05	5 8	2,159.9	274.322	6.7	0.16	0	0.63	-12.6
Mercury....	36.00	874.969	0.21	7 0	3,008.5	88 ^d	7	0.28	0	30	-1.2
Venus.....	67.27	2244.701	0.01	3 24	7,575.4	† †	?	0.85	0	22	-4.4
Earth.....	93.00	3654.256	0.02	0 0	7,926.7§	23 ^h 56 ^m	23.4	1.00	1/297	18.5	.....
Mars.....	141.71	1 ^r 881	0.09	1 51	4,215.6	24 ^h 37 ^m	25.2	0.38	1/192	15	-2.8
Jupiter....	483.88	11 ^r 862	0.05	1 18	88,598§	9 ^h 50 ^m †	3.1	2.6	1/15	8	-2.5
Saturn.....	887.14	29 ^r 458	0.06	2 29	75,060§	10 ^h 14 ^m †	26.8	1.1	1/9.5	6	-0.4
Uranus....	1783.98	84 ^r 013	0.05	0 46	30,878	10 ³ / ₄ ^h	98	0.9	1/14	4	+5.7
Neptune....	2795.45	164 ^r 793	0.01	1 46	27,700	15 ^h 8	29	1.1	1/40	3	+7.8
Pluto.....	3675.27	248 ^r 430	0.25	17 9	3,600	††	††	††	††	<3	+14

* Period of revolution around the earth.

† This is the rotation at the equator.

‡ Rotation of Venus is uncertain but is probably a few weeks.

§ The equatorial diameters of the earth, Jupiter, and Saturn are given; polar diameters are: earth, 7900.0 mi., Jupiter 82,789 mi., Saturn 67,170 mi.

The Moon

The planet Mars has two tiny satellites or moons, Jupiter has eleven, Saturn nine, Uranus five, and Neptune two. The Earth has one comparatively large satellite that is commonly called the Moon. It is a globe of approximately 2160 miles in diameter with a surface deeply pitted by great craters. It has no atmosphere that astronomers can detect and shines only by re-

flected light of the Sun. Though it seems bright to us at "full moon", it reflects only about 7 per cent of the light poured on it by the Sun.

The path of the Moon on its travels around the Earth is elliptical, with the Earth at one focus of the ellipse. The distance of the Moon from the Earth varies from 221,463 miles (perigee) to 252,710

miles (apogee), the average distance being 238,860 miles. The really curious thing about the Moon is that it revolves around the Earth in 27 days, 7 hours, 43 minutes, 11.47 seconds and rotates on its axis in exactly the same time, which is why we always see the same side of the Moon. Due to what are known as "librations in latitude and longitude" and also a "diurnal libration", we do see "around the edge of the Moon" at different times and in this manner a total of 59 per cent of the Moon's surface has been observed, but the other 41 per cent never has been seen by human eye.

Although the Moon revolves around the Earth in approximately $27\frac{1}{3}$ days, it is, on the average, a matter of $29\frac{1}{2}$ days (29 days, 12 hours, 44 minutes, 2.78 seconds) from

one New Moon to the other because the Earth is moving around the Sun while the Moon is moving around the Earth and the "New Moon" depends upon the relative positions of the three bodies. If the planes of orbit of the Earth and the Moon coincided, there would be an eclipse of the Moon at every "Full Moon" and an eclipse of the Sun at every "New Moon", but the (approximately) 5-degree angle between the planes of orbit of the Earth and the Moon causes the Moon on most of its revolutions to miss the Earth's shadow and the Moon's shadow on most trips to miss falling on the Earth. The tidal effects of the Moon are, of course, well known. The "Spring Tides" occur at "Full Moon" and "New Moon" and the "Neap Tides" at "First Quarter" and "Last Quarter".

Eclipses in 1951

(1) Annular eclipse of the sun, March 7. The path of the middle line of the annular eclipse starts in the Tasman Sea, west of New Zealand. It crosses South Island, N. Z., north of Christchurch, and extends eastward and northeast across the south Pacific Ocean (going over Pitcairn Island), finally crossing Nicaragua, Central America. It ends at sunset in the Caribbean Sea, north of Venezuela. In New Zealand, the annular phase occurs about sunrise time (Mar. 8); at Pitcairn I., at 10:25 A.M. (Mar. 7), 150th-meridian-west standard time; at Lake Nicaragua at 4:35 P.M., 90th-meridian-west time.

The eclipse is seen in partial phases over the southern, central, and eastern sections of the U. S. and in Ontario—south of a line running from southern California, Nebraska, and Lake Michigan to the St. Lawrence River. The partial eclipse is seen also in Mexico, Central America, and the north and west sections of South America as far south as Copiapó, Chile. The middle of the partial phase is observable, for instance, from the following stations, the magnitude of the eclipse being indicated:

(2) Annular eclipse of the sun, September 1. The path of the middle line of the annular eclipse commences at West Virginia and travels to the coast, leaving North America just north of Norfolk, Va. It extends eastward and southeast across the Atlantic Ocean and enters Africa at Villa Cisneros in Spanish Sahara, just north of the Tropic of Cancer. The path traverses French West Africa and leaves the continent at Ada on the Gold Coast, going over the Gulf of Guinea and entering the coast again at Cabinda, French Equatorial Africa. Then it goes southeast across Africa, passing over Angola, Northern and Southern Rhodesia, and Mozambique, leaving the coast near Maquival. Crossing the Mozambique Channel, it ends in central Madagascar. The maximum eclipse occurs in western Africa.

Partial phases are observed over the eastern parts of North America, the Atlantic Ocean, southwest Europe, all of Africa and the west Indian Ocean. The first stages are not visible in most of North America, but the middle of the partial phase is seen from the following stations:

	Time	Mag.		Time	Mag.
Austin, Tex.	5:40 P.M.	0.34	Charlottesville, Va.	10:59 A.M.	0.94
Buffalo, N. Y.	5:43	0.09	Dover, Del.	11:00	0.92
New York, N. Y.	5:43	0.17	Harrisburg, Pa.	11:01	0.88
New Orleans, La.	5:43	0.41	New York, N. Y.	11:01	0.87
Montgomery, Ala.	5:44	0.37	Philadelphia, Pa.	11:01	0.89
Cincinnati, Ohio	5:44	0.17	Ithaca, N. Y.	11:02	0.82
Louisville, Ky.	5:44	0.20	Poughkeepsie, N. Y.	11:02	0.85
Tallahassee, Fla.	5:44	0.44	Syracuse, N. Y.	11:02	0.80
Raleigh, N. C.	5:45	0.31	Amherst, Mass.	11:03	0.83
Columbia, S. C.	5:45 P.M.	0.35	Augusta, Ga.	11:04 A.M.	0.78

Astronomical Constants

1 light-year	5,880,000,000,000 mi.
velocity of light	186,273 mi./sec.
astronomical unit or distance earth-to-sun	93,003,000 mi.
mean distance, earth to moon	238,860 mi.
general precession	50".26
obliquity of the ecliptic	23° 27' 8".26—0".4684($t-1900$) *
equatorial radius of the earth	3963.34 statute mi.
polar radius of the earth	3949.99 statute mi.
earth's mean radius	3958.89 statute mi.
oblateness of the earth	$\frac{1}{297.0}$
equatorial horizontal parallax of the moon	57' 2".70
earth's mean velocity in orbit	18.5 mi./sec.
sidereal year	365 ^d .2564
tropical year	365 ^d .2422
sidereal month	27 ^d .3217
synodic month	29 ^d .5306
sidereal day	23 ^h 56 ^m 4".091 of mean-solar time
mean solar day	24 ^h 3 ^m 56".555 of sidereal time

* t refers to the year in question, for example 1948.

The Atmosphere

The atmosphere of the Earth—the blanket of air that surrounds our globe and is essential to life—is of interest to astronomers because of its effect on the light that comes to us from heavenly bodies. Air has weight and volume. It refracts (bends or changes the direction of) light rays that enter it. Due to this refraction, we are able to see the Sun and the Moon before they rise and after they set. The “twinkling” of the stars is caused by convection currents in the air that have a rapidly changing refractive effect on the light from the stars. Our twilight is produced by the diffusion in the atmosphere of light from the Sun when it is below the horizon. Meteors become visible when they are heated to incandescence by friction with the atmosphere when, from outer space, they plunge into it at terrific speed.

Prof. Carl Störmer of the University of

Oslo measured the height of the atmosphere and found it to be more than 600 miles, but about half of it by weight is below 18,000 feet. Although we may remark blandly that something is “as light as air”, the Earth's atmosphere in bulk is of such enormous weight that at sea level it exerts a pressure of approximately 14.7 pounds per square inch. At higher levels, of course, the pressure is less.

Chemically, the atmosphere is composed of nitrogen (approximately 78 per cent by volume), oxygen (approximately 21 per cent by volume), and extremely minor amounts (about 1 per cent in all by volume) of argon, neon, helium, hydrogen and carbon dioxide. There is also present in the air a varying amount of water vapor, which is known as humidity and is distressing when the percentage is high in warm weather.

Important Meteor Showers

Date	Meteor stream	Radiant in constellation
Jan. 1-4	Quadrantids	Boötes
Feb. 5-10	Alpha Aurigids	Auriga
Mar. 10-12	Zeta Boötids	Boötes
Apr. 19-23	Lyrids	Hercules
May 1-6	May Aquarids	Aquarius
May 30	Eta Pegasis	Pegasus
June 27-30	Pons-Winnecke meteors	Draco
July 14	Alpha Cygnids	Cygnus
July 26-31	Delta Aquarids	Aquarius
Aug. 10-14	Perseids	Cassiopeia
Aug. 10-20	Kappa Cygnids	Cygnus
Aug. 21-31	Zeta Draconids	Draco
Sept. 22	Alpha Aurigids	Auriga
Oct. 2	Quadrantids	Boötes
Oct. 9	Giacobinids	Draco
Oct. 18-23	Orionids	Orion
Nov. 14-18	Leonids	Leo
Dec. 10-13	Geminids	Gemini

Meteors and Meteorites

Meteorites are meteors that have come down to Earth. Meteors are masses of mineral or metal or both that plunge into the Earth's atmosphere at great speed and become incandescent from the resultant friction so that they are seen in the sky as “fireballs” (bolides) or “shooting stars”. The “fireballs” are the larger, make a greater flash across the sky and sometimes explode. Meteors come in all sizes but most of them verge on the microscopic and burn up completely in the flash that makes them visible from 40 to 60 miles above the Earth's surface. Millions of them enter our atmosphere every twenty-four hours and probably not more than one or two a day survive to strike the ground as meteorites.

The largest meteorite ever found is located near Grootfontein, Southwest Africa, and its weight is estimated between 50 and

70 tons. The second largest meteorite (the Ahnighito, weight $36\frac{1}{2}$ tons) was found by Admiral Peary, Arctic explorer, at Cape York, Greenland, and is now on exhibition in the Hayden Planetarium, New York City. The largest meteorite found on United States soil is the Willamette (weight $15\frac{1}{2}$ tons), which fell near Portland, Oreg., and is now in the American Museum of Natural History, New York City.

Craters produced by the fall of meteorites have been found in many countries. The first to be recognized and the largest known is Meteor Crater in Arizona, a depression about 4,000 feet in diameter, about 600 feet deep, and with exterior walls rising 150 feet above the surrounding plain. Me-

teor craters have been found near Odessa, Texas; Haviland, Kansas; in the Arabian Desert; in Central Australia and—a notable group of fifty or more—in the region of the Stony Tunguska River in northern Siberia.

Many meteors travel in swarms, believed in some cases to be disintegrated comets. The Perseid shower that occurs annually Aug. 10-14 is thought by some astronomers to be all that remains of Tuttle's Comet and the Leonid shower, which reaches a maximum in mid-November every 33 years, similarly is suspected of being what is left of Tempel's Comet. The Leonid shower of 1833 was the greatest meteor display of which astronomers have record.

Projection Planetaria

Dr. Robert G. Aitken, Director Emeritus of the Lick Observatory, called the Zeiss Projector in planetarium use "the most remarkable instrument that has ever been devised to exhibit impressively, and with the illusion of reality, the motions of the heavenly bodies and the phenomena that result from these motions". The first of these projectors was invented and developed by Dr. Walter Bauersfeld at the Carl Zeiss plant at Jena, Germany, and the first planetarium in which it was put to use was in the Deutsches Museum in Munich, May, 1925. Between that time and the outbreak of World War II, twenty-seven other such Zeiss Projectors were constructed and shipped for use in planetaria spread around the world. Some smaller planetaria, with other projectors, have been built and are in operation in various places in the United States and Canada.

The Zeiss Projector planetaria in the

United States are, in the order in which they were built:

Adler Planetarium, 900 E. Achsah Bond Drive, Chicago 5, Ill.

Director, Wagner Schlesinger.

Fels Planetarium, 20th St., Benjamin Franklin Parkway, Philadelphia 3, Pa.

Director, I. M. Levitt.

Griffith Planetarium, P.O. Box 9787, Los Feliz Station, Los Angeles 27, Calif.

Director, Dinsmore Alter.

Hayden Planetarium, 81st St., Central Park West, New York 24, N. Y.

Acting Chairman, Robert R. Coles.

Buhl Planetarium, Federal and West Ohio Sts., Pittsburgh 12, Pa.

Director, Arthur L. Draper.

Morehead Planetarium, University of North Carolina, Chapel Hill, N. C.

Director, Roy K. Marshall.

Notable Telescopes of the World

Refractor Telescopes

Size in inches	Observatory	Location
40	Yerkes	Williams Bay, Wis.
36	Lick	Mt. Hamilton, Calif.
32.7	Paris (Univ. of)	Meudon, France
31.5	Astrophysical	Potsdam, Germany
30	Allegheny	Pittsburgh, Pa.
30	Bischoffsheim	Nice, France
30	Pulkova	Leningrad, U.S.S.R.

Reflector Telescopes

200	Palomar	Palomar Mt., Calif.
100	Mt. Wilson	Padadena, Calif.
82	McDonald	Mt. Locke, Texas
74	Dunlap	Richmond Hill, Ont.
72	Lord Ross (dismantled)	Parsonstown, Ireland
72	Dominion Astrophysical	Victoria, B. C.
69	Perkins	Delaware, Ohio
61	Harvard	Oak Ridge, Mass.
60	Bloemfontein	Bloemfontein, U. of S. Af.
60	Mt. Wilson	Padadena, Calif.
60	Córdoba	Bosque Alegre, Argentina

Astronomical Photography

Since almost all astronomical research is now carried on by photographing the heavenly bodies, cameras and telescopes designed for this purpose are of the utmost importance.

What many astronomers consider the greatest advance in the making of astronomical instruments in the last fifty years was the production of the Schmidt Camera. The details of construction and method of operation of this camera were made known in 1930 by Bernhard Schmidt of the Hamburg Observatory at Bergedorf, Germany. The Schmidt Camera takes photographs with large fields of vision and sharp definition at much greater speed than was possible with earlier apparatus. Schmidt Cameras as fast as $f/0.6$ have been made, and those with a speed of $f/1$ are common. These remarkable cameras have been installed at many observatories in various parts of the world.

Symbols

☉ the sun	♃ Jupiter	☾ occultation
☾ the moon	♄ Saturn	♌ opposition
☿ Mercury	♅ Uranus	☾ new moon
♀ Venus	♆ Neptune	☾ first quarter
♁ the earth	♇ Pluto	☾ full moon
♂ Mars	♊ conjunction	☾ last quarter

Signs of the Zodiac
and average date of sun entering

1. ♈ Aries, the Ram, Mar. 21	7. ♎ Libra, the Balance, Sept. 23
2. ♉ Taurus, the Bull, Apr. 20	8. ♏ Scorpius, the Scorpion, Oct. 23
3. ♊ Gemini, the Twins, May 21	9. ♐ Sagittarius, the Archer, Nov. 22
4. ♋ Cancer, the Crab, June 21	10. ♑ Capricornus, the Goat, Dec. 22
5. ♌ Leo, the Lion, July 23	11. ♒ Aquarius, the Water-bearer, Jan. 20
6. ♍ Virgo, the Virgin, Aug. 23	12. ♓ Pisces, the Fishes, Feb. 19

Phenomena, 1951 (Eastern Standard Time)

January

d	h	m	
1	11	—	☉ in perihelion
9	—	—	♂ on meridian, 5 a.m., L.C.T.
11	2	31 a.m.	♂ ♀ ☾, ♀ 13' n.
11	7	0 p.m.	♂'s bright moons all on w. side
12	6	9 p.m.	☾ on celestial equator
13	3	—	p.m. Titan, e. elongation from ♀
23	6	—	p.m. ♀, greatest elongation w., 24°31' from ☉
27	6	29 p.m.	♂ ♀ ☾, ♀ 3°58' n.

February

7	—	—	♂ ♀, 4:49-5:36 p.m. C.S.T. for Ill.
8	0	7 a.m.	♂ ♀ ☾, ♀ 30' s.
8	0	34 a.m.	♂ ♀ ☾, ♀ 21' s.
8	—	—	♂ on meridian, 3 a.m., L.C.T.
11	10	—	a.m. ♂ ♀ ☾, ♀ 26' s.
15	11	—	p.m. ♂ ♀ ☾, ♀ 35' s.
23	10	19 p.m.	♂ ♀ ☾, ♀ 4°3' n.
26	4	39 p.m.	♀ on celestial equator

March

2	9	—	a.m. Titan, eastern elongation from ♀
9	—	—	♂ on meridian, 1 a.m., L.C.T.
10	4	—	a.m. Titan, w. elongation from ♀
15	8	22 p.m.	☾ at max. dec. for '51, +28°38'51"
22	7	6 a.m.	☾ on ecliptic
22	11	0 p.m.	☾ on celestial equator
23	—	—	♂ on meridian, 0 a.m., L.C.T.
23	2	54 a.m.	♂ ♀ ☾, ♀ 3°53' n.

April

4	3	58 a.m.	☾ on ecliptic
5	3	—	p.m. ♀, greatest elongation e., 19°12' from ☉
5	—	—	♂ on meridian, 11 p.m., L.C.T.
9	7	53 a.m.	♂ ♀ ☾, ♀ 3°57' s.
10	11	—	p.m. Titan, w. elongation from ♀
10	2	—	a.m. Titan, e. elongation from ♀
20	9	42 p.m.	♂ ♀ ☾, ♀ 4°43' n.
23	6	4 p.m.	♂ ♀ Aldebaran, ♀ 7°10' n.

May

2	11	39 p.m.	☾ on celestial equator
4	4	45 a.m.	♂'s bright moons all on e. side
5	0	—	a.m. Titan, e. elongation from ♀
16	6	2 p.m.	☾ on celestial equator
17	0	—	a.m. ♂ ♀ ☾, ♀ 2°5' n.
22	12	—	noon ♀, greatest elongation w., 25°24' from ☉
30	5	22 a.m.	♂ ♀ ☾, ♀ 3°30' s.
31	5	41 p.m.	♂ ♀ Pollux, ♀ 4°18' s.

June

8	12	58 p.m.	♂ ♀ ☾, ♀ 1°4' s.
10	—	—	♂ Regulus, 8:26-9:29 p.m., for Wash.
13	1	30 a.m.	♂ ♀ ☾, ♀ 3°52' n.
20	3	30 a.m.	♂'s bright moons all on w. side
23	—	—	♂ ♀ Capricorn, em. 0:38 a.m., Wash.
25	12	—	noon ♀, greatest elongation e., 45°25' from ☉
26	7	34 p.m.	♂ ♀ ☾, ♀ 4°14' s.

July

d	h	m	
4	4	—	p.m. ☉ in aphelion
6	10	31 p.m.	♂ ♀ Regulus, ♀ 9' n.
8	3	27 a.m.	♂ ♀ ☾, ♀ 34' s.
10	10	36 a.m.	♂ ♀ ☾, ♀ 4°9' n.
21	—	—	☾ on meridian, 5 a.m., L.C.T.
26	10	8 p.m.	♂ ♀ Regulus, ♀ 34' s.
28	2	45 a.m.	♂'s bright moons all on e. side
29	1	—	a.m. ♀, greatest brilliancy

August

3	2	—	p.m. ♀, greatest elongation e., 27°19' from ☉
5	1	45 p.m.	♂ ♀ ☾, ♀ 2°1' s.
5	3	54 p.m.	♂ ♀ ☾, ♀ 3°41' s.
6	—	—	☾ on meridian, 4 a.m., L.C.T.
6	8	37 p.m.	♂ ♀ ☾, ♀ 4°27' n.
16	—	—	♂ ♀ Capricorn, em. 8:53 p.m. E.S.T., Wash.
18	1	21 a.m.	☾ on ecliptic
29	6	56 p.m.	♂ ♀ ☾, ♀ 1°52' s.

September

2	6	3 p.m.	☾ on celestial equator
4	—	—	☾ on meridian, 2 a.m., L.C.T.
6	1	15 a.m.	♂'s bright moons all on w. side
12	8	—	a.m. ♂ ♀ ☾, ♀ 8°21' n.
16	11	—	a.m. ♀, greatest elongation w., 17°53' from ☉
16	9	4 p.m.	♂ ♀ ☾, ♀ 4°54' s.
24	3	24 a.m.	♂ ♀ ☾, ♀ 4°3' s.
27	3	32 p.m.	♂ ♀ ☾, ♀ 1' s.

October

2	10	20 p.m.	♂ ♀ Regulus, ♀ 54' n.
10	2	—	p.m. ♀, greatest brilliancy
11	6	8 p.m.	☾ on ecliptic
11	—	—	♂ ♀ Aquarii, 8:35-9:37 p.m. E.S.T., Wash.
13	11	18 p.m.	♂ ♀ ☾, ♀ 4°36' s.
25	—	—	♂ Regulus, 6:04-7:22 a.m. E.S.T., Wash.
26	6	24 p.m.	♂ ♀ ☾, ♀ 2' s.
28	1	23 p.m.	♂ ♀ ☾, ♀ 5°22' n.

November

13	11	49 p.m.	♂ ♀ Antares, ♀ 2°24' n.
14	4	—	a.m. ♀, greatest elongation w., 46°39' from ☉
21	5	—	a.m. ♂ ♀ ♀, ♀ 38' s.
25	4	58 a.m.	♂ ♀ ☾, ♀ 5°51' n.
26	3	44 p.m.	♂, max. dec. s., -25°48'54"
28	6	—	a.m. ♀, greatest elongation e., 21°40' from ☉
29	11	—	a.m. ♂ ♀ ♀, ♀ 32' n.
30	4	8 a.m.	♂ ♀ Spica, ♀ 4°31' n.

December

4	9	0 p.m.	☾ on ecliptic
5	9	0 p.m.	♂'s bright moons all on e. side
15	0	24 a.m.	♂ ♀ ☾, ♀ 3°32' s.
15	—	—	♂ ♀ Geminorum, 7:55-8:41 p.m., Wash.
19	8	—	a.m. ♂ ♀ ♀, ♀ 40' s.
22	6	27 p.m.	♂ ♀ ☾, ♀ 6°23' n.
25	8	48 a.m.	♂ ♀ ☾, ♀ 7°44' n.

THE OTHER NATIONS OF THE WORLD



A GUIDE TO MAIN HISTORICAL, POLITICAL, ECONOMIC,
GEOGRAPHIC AND SOCIAL FACTS

Prepared by the Staff of ENCYCLOPAEDIA BRITANNICA

Under the direction of
WALTER YUST, Editor-in-chief

A record of later events may be found in the section: NEWS RECORD OF 1950.

Afghanistan (Kingdom)

Area: approx. 270,000 square miles.

Population (est. 1948): 12,000,000 (approx. 35% Afghan, 21% Tadchik, 8.5% Mongolian, 35.5% others).

Density per square mile: 44.

Ruler: Mohammed Zaher Shah.

Prime Minister: Sardar Shah Mahmud.

Principal cities (est.): Kabul, 206,000 (capital); Kandahar, 77,000 (trading center); Herat, 76,000 (farming center).

Monetary unit: Afghani rupee.

Languages: Pushtu (official), Persian.

Religion: Mohammedan (Sunni, 90%; Shia, 10%).

HISTORY. Wedged between Pakistan, Iran and the U.S.S.R. in southwestern Asia without outlet to the sea, Afghanistan did not become an independent state until 1747. Previously, it had been either a cluster of small states under nominal Arab rule, part of Mongol or Mogul empires, or dismembered among India, Persia and the Uzbeks.

By the 19th century Afghanistan had passed into the British sphere of influence, though the British had to dispatch troops more than once to enforce Afghan friendliness. In 1880 the British recognized Abdur Rahman Khan as Emir and gave him an annual subsidy of more than \$500,000 to delegate management of his foreign relations to Britain. His son, Habibullah, succeeded him in 1901 and kept Afghanistan neutral in World War I despite strong pressure of pro-Turkish elements.

On Aug. 8, 1919, a treaty was signed making Afghanistan free and independent of all British control. The country maintained strict neutrality in World War II, and was admitted to the United Nations in Nov., 1946. Relations with Pakistan were

strained in 1950 by a dispute over areas inhabited by the Pathans in the North West Frontier Province.

GOVERNMENT. Under the 1932 constitution, Afghanistan is a constitutional monarchy, with authority vested in the sovereign and parliament, which has a senate of 60 members who are named for life by the sovereign and a national assembly of 120 elected members. Executive power is exercised by the sovereign and cabinet headed by the prime minister. The sovereign, Mohammed Zaher Shah, was born Oct. 15, 1914.

Military service is compulsory. The army strength is about 90,000, supplemented by tribal bands. There is a small air force.

SOCIAL AND ECONOMIC CONDITIONS. Education is nominally compulsory. Primary schools exist in many parts of the country, but secondary schools only in Kabul and provincial capitals. There were about 100,000 pupils in 425 schools in 1948. There is a university at Kabul.

Only a fifth of the soil is under cultivation, the greater part of the country being mountainous and rocky. Farming is confined to the fertile valleys and plains, sometimes with the aid of irrigation. Two crops a year are usually grown. Important ones include fruits and nuts, castor beans, cereals, madder, tobacco, cotton and vegetables. Wheat is the staple food. The fat-tailed indigenous sheep is the principal source of meat, wearing apparel and skins for export. Camels, humped cattle, oxen and asses are numerous.

Important manufactures include silk, felt, sheepskin coats, soap, carpets and boots. Factories have been erected by gov-

ernment monopolies to produce skins, sugar, textiles, vehicles, and power.

Among the leading exports are karakul skins (mostly to the U.S.), cotton, wool, rugs, carpets and dried fruits.

Most of the trade normally is carried on through Pakistan; wool is exported to the U.S.S.R. in return for consumers' goods. Exports in 1948-49 were estimated at Rs. 900,000,000 and imports at slightly less than that amount.

Afghanistan has no railways or navigable streams. Camels and pack horses are still used by the natives, but motor transport is of increasing importance. The principal trade routes lead south through the Khyber and Khojak Passes to Pakistan, and north to the Uzbek and Turkmen Soviet Socialist Republics. There are about 6,000 miles of roads suitable for motor transport.

Both mineral and forest resources are largely unexploited. There are deposits of coal, copper, gold, iron ore, oil and silver. Timber and gum resin are obtained.

NATURAL FEATURES; CLIMATE. Afghanistan, approximately the size of Texas, is split east to west by the Hindu Kush range of the Himalayas, rising in the east to heights of 24,000 feet. Except in the southwest, most of the country is covered by high snow-capped mountains and deep valleys. The few passes are deep and narrow. The Amu Darya (Oxus), Kabul and Helmand are the most important rivers, and there are hundreds of swift and unnavigable mountain streams. The climate ranges from extremes of below zero to more than 100° in the north; however, it is not so extreme in the south, although snowfall is heavy all over the country in winter. Rainfall, chiefly in the spring, is relatively light. The hottest weather occurs in summer and is particularly severe around Kandahar.

Albania (Republic)

(Shqipëria)

Area: 10,629 square miles.

Population (est. 1948): 1,175,000 (Albanian 99.8%; others, .2%).

Density per square mile: 110.5.

Chairman of Presidium: Omer Nishani.

Premier: Enver Hoxha.

Principal cities (est. 1946): Tirana, 35,000 (capital); Scutari, 30,000 (northern trading center); Koritsa, 27,000 (farming center).

Monetary unit: Lek.

Language: Albanian.

Religions (est.): Moslem, 69%; Orthodox Christian, 21%; Roman Catholic, 10%.

HISTORY. A tiny, backward state approximately the size of Maryland, Albania has acquired considerable importance since World War II because of its close ties with

the Soviet Union and its strategic location at the mouth of the Adriatic. After the fall of the Roman Empire, Albania became part of the Byzantine Empire and was successively invaded by Goths, Serbs and Bulgarians. From 1014 to 1204 it was again under Byzantine rule. An alliance of Albanian chieftains (1444-66) under Skanderbeg failed to halt the advance of the Turks, and the country remained under at least nominal Turkish rule for more than four centuries, until it proclaimed its independence on Nov. 28, 1912.

During World War I Albania was variously occupied by Italian, Greek, French, Serb and Austro-Bulgarian forces. On Aug. 2, 1920, Italy recognized Albanian independence and evacuated the country. Ahmed Zogu, premier in 1922-23, ousted the government of Mgr. Fan Noli in 1924 and became president of a newly constituted republic in 1925. Three years later, after concluding pacts which placed Albania in Italy's sphere of influence, Zogu proclaimed himself King Zog I.

In 1939, Italy occupied the country in a matter of days. During the Greco-Italian war of 1940-41, the Greek armies pushed the Italians back from the Albanian border and occupied a large part of southern Albania. When Germany attacked Greece and Yugoslavia in April, 1941, however, the Greeks withdrew quickly, and the Axis occupation of Albania was complete.

Albania was free of the Axis yoke by the end of 1944, and a leftist provisional government under Colonel General Enver Hoxha was established. That regime was confirmed in power by subsequent elections, and British, Soviet and U. S. recognition. Since then, Albania has collaborated closely with the Soviet Union and supported Moscow and the Cominform in the latter's break with the Tito regime in Yugoslavia. Albania also quarreled frequently with Greece and the western powers. Two main sources of dispute with Greece were the latter's claim to the Albanian territory of Northern Epirus and its charge that Albania was arming anti-government Greek guerrillas.

International tension rose in 1947 when two British destroyers were sunk by mines in the Corfu channel. Britain lodged a sharp protest and referred its complaint to the U. N. Security Council. The Council's decision, favorable to Britain, was vetoed by the U.S.S.R., and Britain carried its case to the International Court of Justice, which ruled on April 9, 1949, that Albania should pay damages to Britain.

GOVERNMENT. Under its 1945 constitution, Albania has a typical soviet government. Supreme power is vested in the popularly elected national assembly, to which the cabinet, headed by the premier, is responsible. The army, estimated at 60,-

000 men, maintains close liaison with the U.S.S.R.

Albania's sovereignty over Saseno, a small but strategic Adriatic island, was confirmed by the Italian peace treaty of 1947.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is nominally compulsory, but illiteracy is high, especially among women. There are no institutions of higher learning.

Albanians are called Ghegs and Tosks, according to whether they live north or south of the Shkumbi River. They live in clans or tribes, in a feudal manner. Moslems predominate in most sections.

Albania is still a primitive country where each family tries to provide most of its own needs. Nearly the whole population is engaged in combined farming and stock-raising. Only a small portion of the central part is fit for tilling. Corn is the chief crop. Others are wheat, tobacco, oats, barley, rye, spelt, olives and citrus fruit. Only a few factories are engaged in processing Albania's food products.

Albania's postwar trade has been limited in volume. Exports include wool, hides, fur, dairy products and bitumen.

Railroad mileage was only 60 in 1949, but two lines are said to be under construction. Good highways were developed by the Italians for strategic purposes, and the Russians continued such construction. The principal and only fully equipped port is Durazzo.

Mineral wealth, thought to be considerable, is relatively unexploited. The principal minerals are aluminum and petroleum, which were developed to some extent during the Italian occupation of 1939-44. There are also deposits of lignite, bitumen, asphalt, gypsum, copper and iron.

Forest resources include large stands of oak, walnut, chestnut and elm, and in the high regions, beech, pine and fir.

NATURAL FEATURES; CLIMATE. Albania is a mountainous state, largely over 3,000 ft. above sea level, with a narrow marshy coastal plain crossed by several rivers. A complex, often inaccessible mountainous hinterland encloses small fertile basins, and contains some wide valleys, of which the largest is that of Lake Ohrid in the southeast. The interior mountain plateaus and basins contain the centers of population. With the exception of the Bofana in the northwest, which is the outlet of Lake Scutari (135 sq. mi.) to the Adriatic, there are no navigable rivers.

The climate is typically Mediterranean, with dry, hot summers and moderate winters. Inland temperatures are lower than those on the coast. Winter frosts occur in the southern part of the country.

Arabia

The Arabian peninsula is at the southwest extremity of Asia. Its rich oil deposits and proximity to Palestine gave it special importance after World War II. Once a political unit, today it consists of the kingdoms of Saudi Arabia and Yemen, the British colony of Aden and six British protectorates.

The peninsula, with an area more than three times that of Texas, and an extreme length of 1,400 miles, is generally a plateau sloping gently eastward from a mountain range that averages 5,000 feet in elevation and runs along its entire west side within ten or fifteen miles of the Red Sea. The range reaches a maximum of 12,336 feet in Yemen to the southwest. Arabia has no rivers and no forests and is principally a desert dotted with many oases.

Most of the peninsula, particularly the interior, has a hot desert climate with frequent changes in temperature. The highlands of the Yemen and southwestern Saudi Arabia, however, together with parts of Oman, have a temperate climate. Jidda, on the Red Sea, has an average daily high temperature of 93° during August.

Mohammed united all Arabs in the 7th century A.D., and his followers, led by the caliphs, founded a great empire with its capital at Medina. Later, the caliphate capital was transferred to Damascus and then Baghdad, but Arabia retained its importance because of the holy cities of Mecca and Medina. In the 16th and 17th centuries, the Turks established at least nominal rule over much of Arabia, and in the middle of the 18th century it was divided into separate principalities.

Through agreements with local rulers, the British extended their rule over the southern and eastern coasts in the 19th century. At the same time, the Wahhabis, a religious sect advocating strict adherence to Mohammed's teachings, gained control over most of central and eastern Arabia, and their work was the beginning of the present Saudi Arabia.

Political Divisions of Arabia

Name	Area (sq. mi.)	Population (est. 1948)
Aden colony (British)	80	80,876*
Aden protectorate†	112,000	650,000
Bahrain Islands		
(Sultanate)†	213	125,000
Kuwait (Sheikdom)†	9,000	120,000
Oman and Masqat		
(Sultanate)†	65,000	830,000
Qatar (Sheikdom)†	4,000	16,000
Saudi Arabia	597,000	6,000,000
Trucial Coast (Sheikdoms)†	16,000	105,000
Yemen (Kingdom)	31,000	1,600,000

* Census 1946. † British protectorate.

Saudi Arabia (Kingdom)

The most important state of the peninsula is almost solely the creation of King Ibn Sa'ud. In 1901, at the age of twenty, he seized the emirate of Riyadh and soon set himself up as the leader of the Arab nationalist movement. During World War I he collaborated with the famous T. E. Lawrence in the successful "desert revolt" against Turkey. On the collapse of Turkey at the end of the war, he freed the whole peninsula from Turkish rule, and through a series of local military campaigns was able to proclaim himself King of Hejaz and Nejd and dependencies in 1927. His territories became the Kingdom of Saudi Arabia in 1932.

Hejaz and Nejd are still under separate administrations. In Nejd, whose capital is Riyadh, Ibn Sa'ud's rule is absolute. The eldest of his numerous sons, Prince Sa'ud, acts as viceroy in his absence. The constitution of Hejaz, whose capital is Mecca, provides for a cabinet of ministers headed by the King's second son, Prince Faisal, who likewise acts as viceroy in his father's absence. There is a consultative legislative assembly in Mecca and various municipal village and tribal councils whose members are named or approved by the King.

The majority of the inhabitants are Bedouin—nomads following their flocks over the desert. There are a few large towns—Mecca, birthplace of the Prophet (150,000), Medina, site of the tomb of the Prophet (45,000), Jidda, port of Mecca on the Red Sea (40,000), and Riyadh, capital of Nejd (60,000).

In Hejaz, Medina produces dates in the oases, and fruit and honey; otherwise, its products are such desert commodities as camels, horses, sheep, hides, charcoal and wool. The most important commercial activity outside of the oil industry is the annual influx of Moslem pilgrims to Mecca and Medina. The products of Nejd include dates, wheat, barley, hides, wool, fruits, butter, camels and livestock.

Oil is produced by the U. S.-owned Arabian-American Oil Company, whose principal field is at Dharan near the Persian Gulf coast. Production has skyrocketed since World War II. In 1949 the output totaled 174,008,629 barrels. The company's expenditures and payroll constitute important invisible exports, and the royalties paid to the government (upwards of \$50,000,000 annually) have greatly strengthened the kingdom's financial condition. A pipe line from Dammam to Sidon, Lebanon, is scheduled to be completed in 1951.

Numerous public works projects, including road, rail and port construction, are being carried out by U. S. engineers, but camel transportation still prevails in most of the country. Air service is provided by

TWA, BOAC and the government-owned Saudi Arabian Airlines.

Kuwait (Sheikhdom)

Kuwait, on the northwestern shore of the Persian Gulf, is an independent state ruled by Sheikh Abdullah as-Salim as-Subah. British protection, first exercised in 1898, has several times prevented it from being absorbed by Saudi Arabia. The territory surrounding Al Kuwait, its port, is largely desert; its trade consists of exchanging Arab goods from the interior for textiles, rice, sugar and other necessities. Kuwait's petroleum reserves, estimated at 9 billion barrels, are under concession to the Kuwait Oil Co. Production in 1949: 89,930,444 bbl.

Oman and Masqat (Sultanate)

Occupying the mountainous southeastern part of the peninsula, Oman is nominally an independent state under the rule of Sultan Sayyid Sa'id bin Taimur. It has been under British protection since the 19th century. The state is best known for its date cultivation, and its riding camels are considered the best in the world. Trade is mainly to and from India. The capital, Masqat (population 4,200), commands the entrance to the Persian Gulf.

Qatar (Sheikhdom)

Qatar occupies the whole of the Qatar peninsula in the Persian Gulf. It is ruled, under British protection, by Sheikh Abdullah ibn Jasim eth Thani. The whole area is claimed by Saudi Arabia. Oil deposits are being explored by a subsidiary of the Iraq Petroleum Co.

Trucial Coast (Sheikhdoms)

This area, extending along part of the Gulf of Oman and the southern coast of the Persian Gulf, is ruled by 7 semi-independent sheiks. Treaties signed with Britain in 1853 and 1892 provided that the sheiks should not cede or sell any part of their land to any other power.

Yemen (Kingdom)

Yemen is an independent state occupying the southwestern extremity of the peninsula. Its ruler is Imam Ahmad, who succeeded to the throne, March, 1948, after insurgents murdered his father, King Yahya.

Its sovereign status was confirmed by the Treaty of San'a with Britain and India (Feb. 11, 1934) and the Treaty of Taif concluded with Saudi Arabia at the cessation of hostilities between the two states on May 13, 1934. The people are permanently settled and are for the most part engaged in agriculture, fishing and trade. Chief products are Mocha coffee, and sheep and goat skins. Much of the trade goes through the port of Aden. The capital and principal town is San'a (population about 25,000).

(For Aden and Bahrein Islands, see British Commonwealth: Asia)

Argentina (Republic) (República Argentina)

Area: 1,079,965 square miles.

Population (census 1947): 16,108,573 (est. 1948, 16,300,000) (approx. 97% of European descent, chiefly Spanish and Italian; 3% Indian and other).

Density per square mile: 14.9.

President: Juan D. Perón.

Principal cities (census 1947): Buenos Aires, 3,000,371 (capital and chief port); Rosario, 464,688 (flour milling); Córdoba, 351,644 (northwest farming center); Avellaneda, 279,572 (industrial suburb of Buenos Aires); Lanús, 272,760 (suburb of Buenos Aires); La Plata, 271,738 (seaport; meat packing).

Monetary unit: Peso.

Languages: Spanish (official), Italian.

Religion: Roman Catholic (state-supported).

HISTORY. A wedge-shaped nation in southeastern South America about a third as large as the U. S., Argentina was beset in 1949-50 by economic troubles—falling production, dollar shortage and shrinking markets; but its basic economy remained strong. Despite periodic disagreements with the U. S., Argentina continued to co-operate in hemispheric affairs while solidifying its relations with neighboring South American nations.

Discovered in 1516 by the Spaniard Juan Díaz de Solís, Argentina developed slowly under Spanish colonial rule. Buenos Aires was settled permanently in 1580 and became a prosperous city; the cattle industry of the Argentine pampas was thriving as early as 1600.

Invading British forces were expelled in 1806-07, and when Napoleon conquered Spain, the Argentinians set up their own government in the name of the Spanish king in 1810. On July 9, 1816, independence was formally declared. Internal dissension, particularly between Buenos Aires and the provinces, was put down under the dictator Juan Manuel de Rosas, who brought about unification from 1829 to 1852. Rosas was overthrown by Justo José de Urquiza, who became the first president under the 1853 constitution, modeled after that of the U. S.

Argentina made great material progress under Presidents Sarmiento (1868-74), Avellaneda (1874-80) and Roca (1880-86). The secret ballot was introduced in 1910 by President Roque Sáenz Peña.

President Hipólito Irigoyen (1916-22) refused to abandon Argentinian neutrality in World War I. Re-elected in 1928, Irigoyen, a radical, was ousted two years later by a conservative revolution led by General José Uriburu. The latter's successor, General Agustín Justo (1932-38) followed a moderate policy and undertook a large public works program. Under the leadership of a former radical, Roberto M. Ortiz,

Argentina proclaimed neutrality at the outbreak of World War II, but in general co-operated in hemispheric defense programs.

Ortiz resigned because of illness in June, 1940, and was succeeded by Vice President Ramón Castillo, a conservative, whose regime was toppled in June, 1943, by a revolt led by General Pedro P. Ramírez. The latter abolished all political parties and broke relations with the Axis on Jan. 26, 1944, after disclosures of German spy activity in Argentina. A clique of army officers, apparently fearing that this would lead to war with Germany, replaced Ramírez on Feb. 24, 1944, with General Edelmiro Farrell.

In the closing months of World War II, Farrell's regime declared war on the Axis (March 27, 1945) and signed the Act of Chapultepec the following April 4. Diplomatic recognition and admission to the U. N. followed. Juan D. Perón, then an army colonel, emerged as strongman and won the 1946 presidential elections. Congress became completely controlled by Perón supporters.

In Feb., 1948, Argentina unsuccessfully reasserted its century-old claim to the British-owned Falkland Islands and dependent areas in Antarctica.

GOVERNMENT. Argentina is a federal union of fourteen provinces and ten territories. Under the new constitution promulgated in 1949, a president and vice president are elected every six years by direct popular vote. The president appoints his cabinet. The vice president presides over the Senate but has no other powers. Both executives are eligible for re-election. The National Congress has two houses—a thirty-member Senate popularly elected for six-year terms, and a Chamber of Deputies (one for each 100,000 electors) popularly elected for six years, one-half the membership of each house being renewed every three years.

Each province has its own constitution, elected governor, legislature and judiciary, but the president may in a crisis take over the local government.

The president, with Senate approval, appoints for life-terms the judges of the federal supreme court, five courts of appeal, and district courts (at least one in each province).

DEFENSE. Under legislation enacted Nov. 29, 1946, all men and women 12 to 50 are subject to military service at the president's discretion. Service from 20 to 22 is compulsory. Active army strength in 1950 was estimated at 100,000; a complete modernization program was under way.

The air force has about 150 combat planes. The navy in 1949 totaled approximately 95,000 tons, including two modernized battleships, three light cruisers and 11 fleet destroyers. The budgetary allot-

ment for defense in 1950 was about 25 per cent.

EDUCATION. Argentina's estimated illiteracy rate of 7-10 per cent is the lowest in all Latin America. Education is free, secular and compulsory between six and fourteen. In 1949 there were 14,649 primary schools with 2,074,233 pupils, 1,414 public and private secondary, normal and special schools with 240,976 students, and 6 universities with 88,823 students.

AGRICULTURE. A farming and stock-raising nation, Argentina devotes 41 per cent of its area to pasture and 11 per cent to cultivation. More than 70 per cent of the cultivated land is planted in cereals—wheat, corn, linseed and oats. In 1948-49 about 13,590,000 acres were devoted to wheat alone. About 20 per cent is in alfalfa for stock feed. Cotton, sugar cane and fruits are important, and Argentina is the world's largest producer of yerba maté (Paraguay tea), the national beverage. The 1949 wine production of 275,000,000 gallons was about 10 per cent above normal.

Estimated crop production for 1949, in short tons, was as follows: wheat 6,000,000, oats 638,000, barley 715,000, rye 242,000, linseed 704,000, corn 5,500,000 (1948), ginned cotton 102,000, and sugar cane 6,765,000 (1947-48).

Cattle raising predominates on the pampas, especially in Buenos Aires province. Sheep raising is more important in Patagonia. In 1947 there were 41,268,470 cattle, 50,856,556 sheep, 2,981,406 hogs and 7,237,663 horses. Wool production in 1949 was 220,000 short tons.

MANUFACTURING. Industrial expansion was accelerated during World War II by the shortage of imports, but industry is still closely allied to agriculture. The principal industry is meat refrigeration, followed by flour milling, textiles, sugar refining, dairy products, quebracho extraction and wine. In 1941 there were 57,940 industrial establishments (101,884 in 1947); products were valued at 6,337,000,000 pesos (7,800,000,000 in 1943). The number of industrial workers averaged 1,169,000 in 1948.

TRADE. Argentina's trade position, favorable in the immediate postwar period, deteriorated steadily in subsequent years as dollar exchange became scarcer. Trade statistics are as follows (in millions of pesos):

	1947	1948*	1949*
Exports	5,505	5,465	3,717
Imports	5,349	5,341	4,645

* Provisional.

Exports in 1949 included meat, wool, hides, and other animal products (50.5 per cent), agricultural products (45.0 per cent) and forest products (2.3 per cent). Imports included machinery (21.5 per cent), textiles (18.6 per cent) and iron and steel (16.3 per cent). Exports went principally to

Britain (23 per cent), Brazil (11 per cent) and the U. S. (11 per cent). Principal suppliers were Italy (16 per cent), Britain (15 per cent) and the U. S. (14 per cent).

COMMUNICATIONS. According to *Lloyd's Register*, the merchant fleet on June 30, 1949, consisted of 357 steamers and motorships (100 tons and over) aggregating 814,274 gross tons, an increase of 180.2 per cent over 1939. The chief Argentine ports are Buenos Aires, second only to New York in the western hemisphere, and La Plata, both on the Plata estuary; and Rosario, a port on the Paraná River.

Railway mileage is about 27,000, nearly all of which radiates outward from Buenos Aires. With the purchase in 1947-48 of the British- and French-owned railways, the system is now government-owned. Highway mileage is upwards of 300,000, largely unimproved. Telephones in 1949 totaled 679,335; broadcasting stations 72 (1946), and radio sets 1,250,000. The air-transportation system is government-owned; domestic air routes extend as far south as Tierra del Fuego. Direct international connections with the rest of the world are maintained by 11 international airlines.

FINANCE. The 1950 budget, as presented to Congress, totaled 11,258,100,000 pesos, distributed as follows: national administration, 4,870,000,000 pesos (covered by general revenue); public works, 964,800,000 pesos (to be covered by borrowing); special accounts, 400,900,000 pesos (self-balancing); autonomous agencies, 5,022,400,000 pesos (self-balancing). In addition, 1,253,200,000 pesos were allotted for the five-year plan. The national debt on June 30, 1949 (excluding bonds held by Treasury) totaled 13,992,100,000 pesos, almost all of which was internal.

TOPOGRAPHY. Second in South America to Brazil in size and population, Argentina is about 2,070 miles long and 860 miles wide at the maximum. In general, the country is a plain, rising westward from the Atlantic to the Chilean border and the towering Andes peaks, including Aconcagua, 22,835 feet, the highest peak in the world outside Asia. The northern area of the Argentine plain is the swampy and partly wooded Gran Chaco. South of that to the Río Negro are the rolling, fertile pampas, rich for agriculture and grazing, and supporting most of Argentina's population. Next southward is Patagonia, a region of cool, arid steppes with some wooded and fertile sections. The eastern part of Tierra del Fuego, the island southern tip of South America, belongs to Argentina.

CLIMATE. Except for the northern Gran Chaco, which has mild winters and torrid summers, Argentina lies in the south temperate zone. The pampas region has an

average temperature of 80°, and freezing is rare. Temperature extremes increase progressively southward. All over Argentina, January is the warmest month and June and July are coolest. At Buenos Aires, the mean annual temperature in January-February is about 73°; in June-July, 50°. The heaviest rainfall, over sixty inches a year, hits the Gran Chaco, while on the pampas it ranges from twenty inches in the west to forty in the northeast.

RIVERS. The three great rivers forming the Plata system—the Paraná, Paraguay and Uruguay—are important commercial arteries in northern Argentina. Rosario and Santa Fé, 260 and 360 miles respectively above Buenos Aires on the Paraná, are accessible to ocean vessels. Many other river ports lie along the three streams' total navigable length of 1,997 miles.

MINERALS. Argentina must import most of nearly every mineral it uses. Oil is produced in Patagonia (1949: 22,500,000 barrels), and there is small mining of tungsten, lead, gold, zinc, tin, silver and beryllium. The government announced discovery of uranium deposits in Feb., 1947. Coal and coke imports in 1949 amounted to 1,361,766 metric tons.

FORESTS. The Gran Chaco area is the world's chief source of quebracho extract. Total exports of this tanning agent obtained from quebracho logs in 1949 were 137,926 tons, of which 27,961 tons were re-exported from Paraguay. Other forest products—hardwoods, dyewoods, lignum vitae, red quebracho, medicinal gums and other tannins—are consumed locally for the most part.

Austria (Republic)

(Österreich)

Area: 32,388 square miles.

Population (est. 1949): 7,090,122 (practically all Austrian).

Density per square mile: 218.9.

Allied Council: Walter J. Donnelly (U. S. A.); Lt. Gen. V. P. Sviridov (U.S.S.R.); Sir Harold A. Caccia (United Kingdom); Lt. Gen. Emile-Marie Béthouart (France).

President: Dr. Karl Renner.

Chancellor: Leopold Figl.

Principal cities (est. 1948): Vienna, 1,750,000 (capital, industrial center); Graz, 248,000 (industrial center); Linz, 200,000 (Danube port); Innsbruck, 103,000 (Tyrolean tourist center).

Monetary unit: Schilling.

Language: German.

Religions (est.): Roman Catholic, 93.68%; Protestant, 3.11%; Jewish, 2.93%; unknown, .28%.

HISTORY. Austria, lying at the western edge of the "iron curtain" in central Europe, continued to be occupied by foreign troops in 1950. After the Foreign Ministers

Conference at Paris in May and June, 1949, hope for independence revived when the Big Four agreed to prepare a draft treaty for Austria; but in 1950 no further progress was made.

The history of Austria before World War I was largely that of the Austro-Hungarian Empire and the Hapsburg dynasty. Its origin was in the province of Ostmark, separated from Bavaria and given to Leopold of Babenberg (A.D. 976) by the Holy Roman Emperor, Otto II. It was ruled by the Babenbergs until 1246, and later passed to Ottakar of Bohemia, who lost it to Rudolf of Hapsburg (1276). In 1437, the three kingdoms of Austria, Hungary and Bohemia were united under the rule of Albert V. For three centuries thereafter, despite almost constant warfare, the states remained for the most part under a single crown. The Hapsburgs gradually added to their possessions, until Charles V, during the 16th century, ruled a vast part of Europe. Emperor Francis I laid down the Holy Roman crown in 1806 at the height of the Napoleonic Wars, in which Austria with her allies was finally victorious. Influence in Germany was lost through defeat by Prussia in the Seven Weeks' War (1866). In 1867, the Dual Monarchy of Austria and Hungary was established, united in the person of the sovereign, Franz Josef I, who ruled until 1916.

Following the defeat of the Central Powers in World War I, the republic of Austria was established in Nov., 1918. It was confined to its present borders by the Treaties of St. Germain (1919) and Trianon (1920). The years immediately following the war were a period of privation, dissension and riots, with Austrian currency becoming worthless and the nation bankrupt. Establishment of a semi-dictatorship by Engelbert Dollfuss, who had become Chancellor in 1932, was followed by an unsuccessful Socialist revolt (Feb., 1934) and an attempted Nazi coup d'état which failed, although Dollfuss was killed. He was succeeded by Kurt von Schuschnigg, whose futile efforts to maintain Austria's independence ended (March 12, 1938) with the bloodless occupation of Austria by German troops. Hitler proclaimed the *Anschluss* of Germany and Austria the next day.

Following the liberation of Vienna by the Red Army (April 13, 1945), Dr. Karl Renner, veteran Socialist, formed a provisional government. Elections held Nov. 25, 1945, resulted in victory for the People's Party, whose leader, Leopold Figl, became chancellor. Dr. Renner was elected president of the Second Austrian Republic (Dec. 20, 1945).

In the years following World War II, there seemed little prospect that Austria would soon regain her independence, since

the Big Four could not agree on fundamental issues of reparations and territorial settlement. Then, at the Foreign Ministers Conference in Paris during May-June, 1949, the Big Four reached preliminary agreement on a draft treaty for Austria, the terms to include restoration of the 1937 boundaries (thus ignoring Yugoslav claims) and return of German-owned assets seized by the U.S.S.R. Austria was to pay Russia \$150,000,000 for the latter. Later negotiations among the Big Four bogged down, however.

ALLIED MILITARY GOVERNMENT. Since World War II, Austria within its 1937 frontiers has been divided into four national zones, as is the city of Vienna. The Allied Council and the inter-Allied governing authority of Vienna consist of the ranking officers of the four participating nations—the U. S., Britain, France and the U.S.S.R. Under an agreement signed by the four powers June 28, 1946, the Council's functions are supervisory rather than administrative.

NATIONAL GOVERNMENT. Austria is a federal republic comprised of nine provinces (including Vienna), each of which has its own elected assembly for the control of regional affairs. The federal parliament consists of two houses—the *Bundesrat* whose 50 members are chosen by the provincial assemblies and the *Nationalrat* whose 165 members are chosen by national election. The president of the republic is elected by parliament in joint session for a six-year term. The government is administered by the chancellor and his cabinet. Party standing in the *Nationalrat* after the elections of Oct. 9, 1949, was as follows: People's Party 77, Socialist 67, Independent 16, Communist 5.

SOCIAL AND ECONOMIC CONDITIONS. In 1948-49, Austria had 5,016 primary schools with 829,326 pupils, 695 secondary and training schools with 73,949 pupils and 4 universities with 17,180 students (1948).

Agriculture employs more than one-third of the population but the country is heavily dependent on imported foodstuffs. About 90 per cent of the total area is classified as productive; of this area, about 40 per cent is intensively cultivated as plowland, meadowland, gardens and vineyards. The amount under plow is relatively small, and mixed farming predominates. Rye and wheat are the leading cereals with 1949 production amounting to 365,400 and 350,400 metric tons, respectively, followed by oats (285,600 tons) and barley (198,700 tons). Potato production was 2,008,200 tons. Other crops include sugar beets, flax, fruits and tobacco.

Stock raising and dairy farming both in the Alpine pastures and the lowlands of the east are of importance. In 1949

there were 2,202,829 cattle, 1,926,983 hogs and 374,992 sheep.

Austria is primarily an industrial country, having, in 1948, 328,729 industrial establishments with 1,978,000 workers (1949). The metallurgical, engineering, textile and wood industries are most important. Styria is responsible for almost all the iron and steel production, which included in 1949 834,574 metric tons of steel and 837,748 tons of pig iron.

Legislation providing for the nationalization of 70 firms, comprising a substantial portion of Austrian basic industry, was enacted late in 1946. Most of the industrially important regions are in the Soviet zone.

The constantly unfavorable prewar trade balance was offset in part by international loans and in part by invisible exports, such as tourist expenditures, income from foreign investments and transit trade.

Trade statistics are as follows (in millions of schillings):

	1947	1948	1949
Exports	842	1,984	3,229
Imports:			
commercial	1,191	2,209	4,477
relief and ERP	2,120	2,630	1,867

Principal sources of commercial imports in 1949 were Germany (16 per cent), Italy (12 per cent), Czechoslovakia (8.7 per cent) and Britain (6.3 per cent). Chief customers were Italy (18 per cent), Germany (7.7 per cent), Czechoslovakia (7.2 per cent) and Yugoslavia (6.7 per cent). The leading exports were iron products (18 per cent), timber (15 per cent), pig iron and paper.

The construction of railways and roads has been hampered by physical difficulties. There were 3,762 miles of railway in 1949, partly electrified. Water traffic is restricted for the most part to the Danube River. The major river ports are Linz and, especially, Vienna, which is also an important rail, road and air center.

Government revenue was estimated at 9,617,200,000 schillings in 1950 and expenditure at 9,617,100,000 schillings.

NATURAL FEATURES AND RESOURCES; CLIMATE. Austria covers an area about equal to that of Scotland and includes much of the mountainous territory of the eastern Alps (about 92.3 per cent of the country is classified as mountainous). From the Rhine Valley, Austria's western frontier, these ranges cross the country from west to east, merging on the north and northeast into the Danube Valley and the open Vienna basin. On the east and southeast, the ranges merge into the forested foothills overlooking the undulating countryland of western Hungary. The country contains many snowfields, glaciers and snow-capped peaks. The prin-

cial river, the Danube, enters in the northwest and crosses northern Austria.

Austria possesses valuable mineral resources. In Styria lies one of the largest European deposits of iron ore. Copper is mined in Salzburg, Tyrol and lower Austria, and lead and zinc in Carinthia. Other minerals include bauxite, graphite, sulfur and manganese. Fuel resources comprise small coal deposits in lower Austria and large quantities of lignite, found everywhere except in Salzburg. Production in 1949 was 3,815,550 metric tons. Large supplies of coal and coke must be imported, but extensive water power resources are available for exploitation. Petroleum fields in the Zistersdorf and Mühlberg areas, both in the Soviet zone, produced an estimated 5,400,000 barrels in 1949.

Variety is the keynote of Austria's climate. The mean annual temperature in the north ranges between 45° and 48°, and in no month does the average exceed 68°. Most of the rainfall occurs during summer. In the Tyrol, mild winters and warm summers (with temperatures often higher than 68°) are customary; maximum precipitation is in spring and summer. The mean annual temperature of Vienna is 49.4°, and the range about 40°.

Belgium (Kingdom)

(Royaume de Belgique— Koninkrijk België)

Area: 11,783 square miles.*

Population (est. Dec. 31, 1949): 8,625,084 (Wallon, Flemish).

Density per square mile: 731.9.

Sovereign (in retirement): King Leopold III.

Prince Royal: Prince Baudouin.

Premier: Joseph Pholien.

Principal cities (est. 1948, including suburbs): Brussels (Bruxelles), 1,296,687 (capital); Antwerp (Anvers), 794,280 (port and commercial center); Liège, 573,176 (iron and steel); Ghent (Gand), 442,792 (textiles).

Monetary unit: Belgian franc.

Languages: French, Flemish.

Religion: Predominantly Roman Catholic.

* Including small area taken over from Germany in 1949.

HISTORY. In 1914 and again in 1940, Belgium was crushed by German armies because its position in the Low Country area made it a highway on the invasion route to France. Highly industrialized, a bit larger than Maryland and second most densely populated nation in Europe, Belgium emerged from World War II in fair economic condition but, politically, the country suffered crisis after crisis in the struggle between conservatives and elements of the left, especially over the

return of King Leopold III to the throne. Leopold returned to Belgium on July 22, 1950, but violent Socialist-led rioting forced him to agree to turn over his powers to his son, Baudouin, on Aug. 1.

Perhaps the earliest mention of the Belgians in history was in 57–50 B.C., when they were conquered by Julius Caesar. In the Middle Ages the Belgian towns became wealthy and virtually autonomous as great textile centers. Belgium became part of Burgundy in 1385 and, later, part of the Spanish domains of Charles V. By the Treaty of Utrecht, in 1713, Belgium went to Austria, though retaining its autonomy, and from 1792 to 1815 it held a similar status under France. United with the Kingdom of the Netherlands by the Congress of Vienna in 1815, the Belgians revolted and proclaimed independence on Oct. 4, 1830, choosing as their sovereign Leopold of Saxe-Coburg. Taking the title of King Leopold I, he ruled from 1831 to 1865.

Belgium progressed peaceably under Leopold I and his son, Leopold II, who reigned from 1865 to 1909, and was succeeded by his nephew, Albert I (1909–34).

Despite heroic Belgian resistance under the personal leadership of Albert, the country was overrun by the Germans in 1914 and occupied throughout World War I. The treaty of 1919 gave Belgium the regions of Moresnet, Eupen and Malmédy, and a mandate over Ruanda-Urundi in Africa.

As World War II approached, Belgium strove to protect its legal neutrality; at the same time the nation rearmed rapidly and built a strong series of fortifications, especially along the Albert Canal. But these defenses were no great obstacle to the Germans, who invaded the country for the second time in a generation on May 10, 1940.

King Leopold III, who had succeeded his father upon the latter's death in a mountain-climbing accident in 1934, ordered the Belgians to surrender to the Nazis and was taken prisoner on May 28, 1940—eighteen days after the first German attack. The cabinet of Hubert Pierlot escaped from the country and set up a government-in-exile in London. When that government returned to Belgium on Sept. 7, 1944, King Leopold's brother, Prince Charles, was elected regent (Leopold was still a prisoner). Pierlot, a Catholic, became head of a coalition government. He was succeeded in Feb., 1945, by Achille van Acker (Soc.).

The Christian Socialists (Catholics) won a plurality in the elections of Feb. 17, 1946. Their pro-Leopold stand prevented them from taking office, however, and the country was ruled by the Liberal-Socialist-Communist cabinets of Van Acker (Mar. 31, 1946) and Camille Huysmans (Aug. 2,

1946) until March, 1947, when Socialist Paul-Henri Spaak formed a Socialist-Christian Socialist coalition cabinet. He was succeeded by Gaston Eyskens, a Christian Socialist, who succeeded in forming a Christian Socialist-Liberal cabinet on Aug. 10, 1949, to end the political stalemate which followed the elections of June 28, 1949. He and his cabinet resigned on Mar. 19, 1950, following a national referendum on Mar. 12 in which 57.7 per cent of the electorate voted for Leopold's return. In elections held June 4, 1950, the Christian Socialists won control of the Chamber of Deputies; and on June 8, Jean Duvieusart became premier at the head of a Christian Socialist cabinet.

On March 17, 1948, Belgium signed a 50-year defense treaty with Britain, France, Luxembourg and the Netherlands, and in April, 1949, the nation joined the North Atlantic alliance.

Leopold III was born Nov. 3, 1901; in 1926 he married Princess Astrid of Sweden. They had three children, of whom Prince Baudouin (born Sept. 7, 1930) is Prince Royal. Under the retirement arrangement of Aug. 1, 1950, Leopold will abdicate when Baudouin is 21.

Astrid was killed in 1935 in an automobile accident. On Sept. 11, 1941, while he was a German prisoner, Leopold married a commoner, Marie Baels. She renounced the title of queen upon marriage; and became Princess de Réthy.

GOVERNMENT. Under the 1831 constitution, Belgium is a constitutional, hereditary monarchy. The king's authority is delegated to the ministers whom he appoints and dismisses to conform with the parliamentary majority. The ministers who constitute the cabinet must have the confidence of parliament, which consists of a 212-member chamber of deputies popularly elected, and a senate of varying membership, elected both directly and indirectly. All members serve for four years unless one or both houses are dissolved by the king, in which case new elections must be held in forty days. Belgium's nine provinces and 2,670 communes have crown-appointed officials but retain considerable autonomy with locally-elected councils.

The election of June 4, 1950, returned 108 Christian Socialists (as against 105 in the June, 1949, election), 77 Socialists (66), 20 Liberals (29) and 7 Communists (12) to the Chamber of Deputies.

The army's strength in 1949 was officially placed at 87,360, organized in one army corps of two divisions. In the British zone of Germany, Belgium had several thousand men. In Belgian Congo were 18,000 men in three brigades of native troops with Belgian officers. The air force has about 110 combat planes. The navy, abolished in 1928, was reformed after World War II and

in 1949 had 2 sloops, 1 frigate and minor craft.

EDUCATION. Education, free and universal for children from six to fourteen, is under state control in three divisions: primary, intermediate and higher. Primary schools in 1947-48 numbered 8,697 with 788,514 pupils; state secondary schools, 345 with 87,218 pupils; and normal schools, 157 with 10,883 students. There are four universities: official, Ghent and Liège; unofficial (private), Brussels and Louvain with a total of 15,000 students in 1948. There are also private schools, many under religious auspices.

AGRICULTURE. About 60 per cent of the total area is under cultivation, and one-half the farmed area is devoted to forage crops. Principal crops in 1949 (in metric tons) were wheat, 425,000; rye, 260,000; barley, 172,133 (1948); oats, 384,522 (1948); and sugar beets, 1,925,000. Other crops are fodder beets, flax and fruit. The pastoral industry, especially dairy farming, flourishes. In 1948-49, Belgium had 1,688,000 cattle, 113,000 sheep and 1,074,000 hogs.

MANUFACTURING. Belgium is one of the most highly industrialized nations in Europe, largely because of vast, readily accessible coal reserves. Industry has not advanced, however, at the expense of agriculture; the Belgian economy is based on both. In Jan., 1948, there were 248,128 industrial establishments with 1,000,010 workers.

The metallurgical, textile and building industries are important. Associated with iron and steel is a considerable engineering industry, shipbuilding in Antwerp, and machinery and railway stock in Brussels. The centuries-old textile industry produces linen (Courtrai); cotton (the southeast); and synthetic fibers. Antwerp, using the output of mines in the Congo and Angola, rivals Amsterdam in diamond cutting.

Foreign trade is especially vital to the Belgian economy. The Belgian-Dutch-Luxembourg customs union (Benelux), established on Jan. 1, 1948, is one of the five great trading areas in the world. Trade of Belgium and Luxembourg (in billions of francs) is as follows:

	1947	1948	1949*
Exports	61.5	74.1	79.7
Imports	84.9	87.0	81.1

* Provisional.

Chief customers in 1949 were the Netherlands 15 per cent, Germany 11 per cent, Britain 9 per cent, France 7 per cent and the U. S. 5 per cent. Leading sources of imports were the U. S. 18 per cent, France 10 per cent, Britain 9 per cent and the Netherlands 9 per cent. Chief exports in 1948 were iron and steel and products, 30 per cent; wool and manufactures, 7 per cent; fertilizers, 4.7 per cent; and mechanical products, non-electrical, 4.2 per cent.

COMMUNICATIONS. Inland transportation facilities are highly developed. Railroad mileage is 3,090. Navigable waterways total 998 mi., including the well-developed canal system. Before World War II, Belgium had the second largest river fleet on the Rhine. Highway mileage in 1948 totaled 6,660, mostly improved. The merchant fleet on Jan. 1, 1949, totaled 91 ships (over 100 tons) of 279,140 net tons. Sabena, the government-controlled airline, flew 1,204,000,000 passenger-miles in 1949.

FINANCE. Recent data are as follows (in billions of francs):

	1948*	1949*	1950*
Revenue	65.6	69.4	62.0
Expenditure	79.1	71.6	62.0

* Budget estimate.

NATURAL FEATURES AND RESOURCES; CLIMATE. The northern third of Belgium is a plain extending eastward from the coast of the North Sea. North of the Sambre-Meuse Rivers is a low plateau, varying from 250 to more than 600 feet in height, and to the south lies the Ardennes plateau, rising to a maximum of about 2,300 feet. The shallowness of the North Sea off Belgium precludes the development of good harbors; some of the port advantages of Antwerp, on the Schelde River, are offset by the fact that the approaches to it are through Dutch territory.

The principal mineral is coal; production in 1949 was 27,852,000 metric tons. The Ardennes coalfield, now nearly exhausted, extends southward into France. The Campine field, comparatively new, lies in the northeast. Iron ore, lead and zinc also are mined, principally in the Ardennes. Belgian mining, highly developed, normally employs about 200,000 people.

Forests cover about 20 per cent of Belgium, but their products are relatively unimportant. Fishing is vital in the economy. The 1948 catch was about 64,440 metric tons.

The climate is temperate. Ostend, on the sea, has an average annual temperature of 49° and annual rainfall of 27.5 inches, about like that of Chicago. Baraque Michel, in the Ardennes heights, has an average temperature of 43°, rainfall of 59.5 inches, and considerable snow in the winter.

Belgian Colonial Empire

Country	Area (sq. mi.)	Native pop. (est. 1949)
Belgian Congo (colony)	904,974	10,914,208
Ruanda-Urundi (U. N. trust territory)	20,120	3,779,000*

* 1948.

BELGIAN CONGO—Status: Colony.

Capital: Léopoldville (population 1948: 126,115; Europeans, 7,244).

Governor General: Eugène Jungers.

Foreign trade (1948)*: exports, 10,817,465,000 fr.; imports, 8,383,140,000 fr.; chief exports, copper, cotton, palm oil, gold.

Agricultural exports (1948, in metric tons): cotton, 51,224; coffee, 30,545.

Mineral production (1948, in metric tons): copper (smelter), 157,397; tin (ingots), 3,921; diamonds, mainly industrial, 11,250,000 carats; gold, 10,103 kg.; zinc (concentrates), 112,822; uranium.

Forest exports (1948, in metric tons): palm oil, 110,387; palm kernels, 83,375; gum copal, 10,919; rubber, 5,072.

* Including Ruanda-Urundi.

The mineral-rich Belgian Congo, in central Africa, with a narrow outlet to the Atlantic through the northwestern tip of Portuguese Angola, was acquired Nov. 15, 1908, by the Belgian state from the Belgian king, Leopold II. The latter had backed exploration of the area by the English explorer, H. M. Stanley, and in 1885 had been recognized by the great powers as personal sovereign and proprietor of the Congo Free State, as it was then called. The area is now administered by a governor general responsible to the cabinet minister for the colonies. The governor general has unrestricted executive and legislative powers, and the colony has no representative institutions of its own. During World War II it furnished vital war materials to the Allies. The European population in 1948 was 44,305, of whom 31,889 were Belgians.

RUANDA-URUNDI—Status: U. N. trust territory, united administratively with the Belgian Congo.

Capital: Usumbura.

Governor General: Eugène Jungers.

Principal products: tin, coffee, gold, cotton, hides.

Ruanda-Urundi, in east Africa, was assigned to Belgium as a mandate by the League of Nations at the end of World War I, before which it was a portion of German East Africa. It is administered under the direction of the governor general of the Belgian Congo by a vice governor general. The area, placed under U. N. trusteeship in Dec., 1946, is largely mountainous, with livestock grazing the principal native activity.

Bhutan (Kingdom)

Area: approx. 18,000 square miles.

Population (est.): 300,000 (mostly Bhotiya).

Density per square mile: 16.7.

Ruler: Maharaja Sir Jig-me Wang-chuk.

Capital: Punakha.

Monetary unit: Indian rupee.

Language: Tibetan dialect.

Religion: Buddhism.

HISTORY. Bhutan is a semi-independent state lying on the southeast slope of the

Himalayas, bordered on the north and east by Tibet and on the south and west by the Republic of India. The area is said to have been invaded and settled by Tibetan troops in the 9th century A.D. After almost a century of conflict between the Bhutanese and the British in India, British troops invaded the country in 1865 and negotiated an agreement under which Britain undertook to pay an annual allowance to Bhutan on condition of good behavior. A treaty signed with India in Aug., 1949, increased this subsidy and placed Bhutan's foreign affairs under Indian control.

Until 1907 Bhutan's government was under the dual control of the clergy and laity, but the country is now ruled by a hereditary maharaja.

The dominant people are the Bhotiyas, who are of Tibetan origin, speak a Tibetan dialect, and profess the same form of Buddhism as is prevalent in Tibet.

ECONOMIC CONDITIONS. The chief crops are rice, corn and millet; the fields, laid out on hillside terraces, are watered by an ingenious system of irrigation. Bhutan is famous for its small though sturdy mountain ponies. The chief industries are metal work, cloth weaving and fine basket and mat work. Trade is insignificant, and much of it is conducted by barter.

NATURAL FEATURES. The whole of Bhutan presents a succession of lofty and rugged mountains running generally from north to south and separated by deep valleys. Mountains in the north reach a height of 24,000 feet. The climate varies according to the topography. There are valuable forest stands ranging from semi-tropical woods on the lowest slopes to coniferous forests on the more temperate slopes to the north.

Bolivia (Republic) (República Boliviana)

Area: 416,040 square miles.

Population (est. 1949): 3,990,000 (1944: 52% Indian, 28% Mestizo, 13% white, .2% Negro, 6.8% unspecified).

Density per square mile: 9.6.

President: Mamerto Urriolagoitia.

Principal cities (est. 1948): La Paz, 319,600 (de facto capital); Cochabamba, 83,000 (commercial center); Oruro, 50,000 (tin mines); Potosí, 47,000 (mining); Sucre, 35,000 (legal capital).

Monetary unit: Boliviano.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Famous since Spanish colonial days for its mineral wealth, modern Bolivia was once a part of the ancient Incan Empire. After the Spaniards had defeated the Incas during the first part of the 16th century, Bolivia was subjected to the Spanish Viceroyalty of Peru, and its pre-

dominantly Indian population was reduced to slavery. During the successive South American revolts against Spain in the early 19th century, Upper Peru (as Bolivia was then called) was a vast battlefield contested by Spanish and patriot troops. The country finally won its independence in 1825; the new republic was named after Simón Bolívar, South America's famed liberator.

Bolivia's political history since independence has been extremely stormy. Since 1825 it has had more than sixty revolutions, seventy presidents and eleven constitutions. No elected president has ever served out his term.

Harassed by internal strife, Bolivia lost great slices of territory to three neighbor nations. Several thousand square miles and its outlet to the Pacific were taken by Chile after a disastrous war in 1879-83. In 1903 a piece of Bolivia's Acre province, rich in rubber, was ceded to Brazil. And in 1938, after a war with Paraguay, Bolivia gave up claim to nearly 100,000 square miles of the Gran Chaco.

Recent years have been typical of Bolivia's turbulent political history, with several illegal seizures of power culminating in a leftist revolution on July 21, 1946, which overthrew the rightist regime of Lt. Col. Gualberto Villarroel, who in Dec., 1943, had ousted the legally elected president, Gen. Enrique Peñaranda. Villarroel was murdered by a mob which stormed the presidential palace. Elections held Jan. 5, 1947, gave none of the presidential candidates an absolute majority. The slight plurality of Dr. Enrique Hertzog, candidate of the Socialist Republican Union, a center group, was endorsed by Congress and he took office for a four-year term on March 10, 1947. Continued political and labor unrest and martial law marked Hertzog's administration and that of Mamerto Urriolagoitia, who became president when Hertzog resigned because of illness in Oct., 1949.

GOVERNMENT. Under the 1938 constitution, Bolivia is a republic, electing by popular vote a president every four years, a 27-member Senate every six years, and a 111-member Chamber of Deputies every four years. The president appoints the 10 members of his cabinet. The Indian majority is virtually disfranchised, and less than 3 per cent of the population voted in the 1947 presidential elections.

Military service is compulsory, with a two-year training period beginning at nineteen and service on reserve until fifty. The army is fixed by law at 15,000, and there are about 12,000 federal police. The air force is being re-organized and trained by U. S. officers.

SOCIAL AND ECONOMIC CONDITIONS. Bolivia has an illiteracy rate estimated in

1948 at over 80 per cent, highest in Latin America. A contributing factor is the high proportion of pure Indian population. In 1944 enrollment at 1,740 primary schools was 144,056, and at 55 intermediate schools, 17,496. There are five universities and several normal schools and educational centers for Indians. The government is reorganizing the curriculum for rural schools.

Mining is the backbone of the economy. Tin, accounting normally for 70 per cent of Bolivian exports, is by far the most important mineral, most of it coming from the plateau regions of Potosí and Oruro. During World War II, Bolivia was the world's largest tin producer.

Mineral production for 1948 was as follows: tin, 37,336 metric tons; silver, 7,562,000 ounces; copper, 6,600 metric tons; gold, 4,000 ounces. Antimony, zinc ore, lead, manganese ore, tungsten concentrates, and mercury are also produced; and uranium deposits have been reported. Southern Bolivia is rich in oil, as yet relatively unexploited. Production in 1949 was at the rate of approximately 51,000 barrels monthly.

The 5,000,000 acres under cultivation produce wheat, rice, sugar, potatoes, cacao, barley, maize, coca (source of cocaine), tobacco and cotton. Production of such basic foodstuffs as wheat and rice, however, is insufficient for domestic needs, and considerable quantities must be imported. Cattle are raised in the more temperate regions of the east and south, sheep in the departments of La Paz and Cochabamba, and llamas, alpacas and vicuñas, important sources of hides, wool and meat, are raised on the plateaus by Indians whose economy is largely dependent upon them. The fur-bearing chinchilla, a native of the colder plateau regions, is also bred.

Manufacturing received considerable impetus during the Chaco War, but the output is insufficient to supply the domestic demand. Almost three-fourths of the manufacturing is carried on in La Paz. Major manufactures in 1947 had a value of about \$27,000,000.

Tin and other minerals comprise almost the whole of Bolivia's exports. Since the country is landlocked, foreign trade must pass through free ports in Chile and river ports on the Amazon. Trade statistics for three years follow (in millions of U. S. dollars):

	1946	1947	1948*
Exports	73.6	81.2	102.7
Imports	51.4	59.6	68.7

* Partially estimated.

Chief exports in 1948 were tin (65 per cent) and silver (4 per cent). Principal suppliers were the U. S. (62 per cent) and Peru (9 per cent); principal customers, the U. S. (57 per cent) and Britain (39 per cent).

From its lowland tropical forests, Bolivia gets rubber, quinine bark, almonds and brazil nuts, dyewoods, mahogany, quebracho and other hardwoods. Rubber exports in 1947 were 2,503 short tons.

Railway mileage totals 1,454, all in western Bolivia; the principal lines connect La Paz with the Chilean ports of Arica and Antofagasta. Highway mileage in 1947 was 6,280, much of it unimproved. Airlines play an important role in Bolivian transportation: national airlines, including the Lloyd Aéreo Boliviano, flew 1,300,000 air miles in 1947, and Pan American Airways links the country with the rest of the Americas. In the lowlands, thousands of miles of navigable streams are the chief means of transportation.

Bolivia's 1949 budget, as announced in May, 1949, balanced receipts and expenditures at 2,125,421,537 bolivianos. On Dec. 31, 1947, the total public debt was 6,819,000,000 bolivianos, including arrears of interest.

NATURAL FEATURES AND CLIMATE. Landlocked Bolivia is a low alluvial plain throughout 60 per cent of its area toward the east, drained by the Amazon and Plata river systems. The western part, enclosed by two chains of the Andes, is a great plateau—the Altiplano—measuring 500 by 80 miles at an average altitude of 12,000 feet. More than 80 per cent of the population lives on the plateau, which also contains La Paz, the highest capital city in the world. Lake Titicaca, half the size of Lake Ontario, is one of the highest large lakes in the world, at an altitude of 12,507 feet. Islands in the lake hold ruins of the ancient Incan civilization.

The climate varies from the humid heat of the equatorial lowlands in the east to the arctic cold of the Andean peaks. In the lowlands, the average temperature is about 77°, with no great departures; rainfall is heavy throughout the year. At higher elevations in the west (to 11,000 ft.) the climate is temperate, with occasional winter frost. In the great central plateau, the weather is always cool. In La Paz it averages about 50.4°.

Brazil (Republic)

(Estados Unidos do Brasil)

Area: 3,291,416 square miles.

Population (est. 1950): 49,800,000 (1945: white, 63%; Mestizo, 21%; Negro, 14%; Indian and other, 2%).

Density per square mile: 15.1.

President: Eurico Gaspar Dutra.

Principal cities (est. Dec. 31, 1946): Rio de Janeiro, 2,014,185 (est. Dec. 31, 1949, 2,129,648) (capital and chief port); São Paulo, 1,514,241 (coffee); Recife (Pernambuco), 397,808 (seaport); Salvador (Baia),

331,609 (seaport); Pôrto Alegre, 310,817 (seaport); Belo Horizonte, 241,337 (mining); Belém (Pará), 235,576 (Amazon port).

Monetary unit: Cruzeiro.

Language: Portuguese.

Religion: Roman Catholic, 95%.

HISTORY. Brazil, the only Latin American nation deriving its culture and language from Portugal, is by far the largest country in South America, covering nearly half the continent. In the Western Hemisphere it is second to Canada. In the world, it ranks after the U.S.S.R., China and Canada.

Brazil was discovered in 1500 by the Portuguese admiral, Pedro Alvares Cabral. Portuguese colonization efforts began in 1532 and Brazil became a royal colony seventeen years later. The later attempts of France and Holland to colonize Brazil were defeated by the Portuguese.

During the Napoleonic wars, the prince regent of Portugal (later King John VI) fled his country in advance of the French armies, and set up his royal court at Rio de Janeiro in 1808. John was drawn home by a revolution in 1820 and the Brazilians, after holding the seat of Portuguese government, rebelled at resuming colonial status and declared their independence in 1822 under Pedro, son of John VI. Harassed by trouble with his parliament, Pedro I abdicated in 1831 in favor of his five-year-old son, who became emperor in 1840 as Pedro II. He proved to be an enlightened and popular monarch.

Despite his good works, however, Pedro II was forced to abdicate in 1889 following a military revolt, after which a republic was set up. Until 1893 Brazil was under two military dictators, Marshal Deodoro da Fonseca and Marshal Floriano Peixoto. After a revolt against the latter in 1893, Brazil returned gradually to stability under a succession of five civilian presidents—Prudente de Moraes Barros, 1894–98; Manuel Ferras de Campos Salles, 1898–1902; Francisco de Paula Rodrigues Alves, 1902–06; Affonso Penna, 1906–09, who died in office; and Nilo Pecanha, 1909–10.

The president during World War I, Wenceslau Braz, co-operated with the Allies and declared war on Germany Oct. 26, 1917. Reckless expenditure marked the term of the next chief executive, Epitacio da Silva Pessoa, 1919–22, while the presidency of Arthur Bernardes, 1922–26, was bedeviled by financial difficulties and army dissension. His successor, Washington Luiz Pereira da Souza, 1926–30, had to cope with the world depression and was overthrown by a revolutionary group under Getulio Vargas, who took over as provisional president.

Vargas' new constitution in 1934 sharply curtailed state's rights and emphasized a nationalistic policy. In 1937 Vargas seized

absolute power, setting up another constitution which extended his term of office indefinitely. In World War II, Brazil co-operated well with the United Nations. Allied air bases were set up in Brazil, Brazilian naval forces patrolled the South Atlantic, and a Brazilian expeditionary force fought in Italy after the nation's declaration of war against the Axis in Aug., 1942.

National fear that Vargas would never fulfill his promise of free elections led to his overthrow on Oct. 29, 1945, and the transfer of his powers to Chief Justice José Linhares. In the subsequent elections, on Dec. 2, 1945, victory went to the Vargas candidate—Gen. Eurico Gaspar Dutra, inaugurated as president on Jan. 31, 1946.

In Jan., 1948, Dutra's Social Democratic party and the opposition National Democratic Union pledged their support of the government in its fight against Brazilian Communists. The Chamber of Deputies voted to oust all Communist legislators. A bill giving Dutra extraordinary powers of security was passed despite stormy protests.

GOVERNMENT. Under the Constitution of Sept. 18, 1946, Brazil is a federation of twenty states, five territories and one federal district. The president is popularly elected for a five-year term and may not succeed himself. The national Congress is composed of two houses—the Senate, whose members serve for eight-year terms, and the Chamber of Deputies, elected for four-year terms. Members of Congress are elected by equal, direct, compulsory and secret suffrage under a system of proportional representation.

Among the important innovations of the 1946 Constitution are articles empowering the federal government to create state-owned monopolies in the public interest and making the exploitation of mines and subsoil resources dependent on federal authorization. The Constitution also authorizes the government to intervene in labor disputes but recognizes the general principle of freedom of association and the right to strike. Labor courts handle labor-management disputes.

The twenty states, with popularly elected legislatures and governors, and their own constitutions, have considerable autonomy, but during the Vargas regime they suffered from federal intervention.

DEFENSE. Military service is compulsory beginning at twenty-one, with an initial training period of one year and service on reserve until forty-five. The permanent army of 112,300 men and 258,000 reserves in 1940 was greatly expanded in World War II. Its strength in 1948 was estimated at 118,000, including 38,000 federal police.

The army received a considerable amount of U. S. lend-lease military goods

during World War II. The air force, under a separate Ministry of Aviation since 1941, expanded during the war and took an active part in the Italian campaign.

The navy on Jan. 1, 1950, had in active service one old battleship, 7 fleet destroyers, 8 escort destroyers, 4 submarines and smaller craft. During World War II about thirty small warships were acquired, mostly from the United States.

EDUCATION. Education is free and compulsory; under the 1946 constitution it is given in Portuguese only. According to the 1940 census, 43.6 per cent of the population 18 years of age and over could read and write. In 1947 there were 58,502 primary schools with 4,336,437 pupils, about 1,500 secondary schools with 300,000 students and about 2,700 vocational, commercial and professional schools with 200,000 students. There are 10 universities, of which 3 are private (Catholic), 6 state and one federal (University of Brazil at Rio de Janeiro).

AGRICULTURE. Agriculture is the basis of Brazil's economy, but only 4 per cent of its area is under cultivation, the rest being grazing, forest, or non-productive land. Brazil leads the world in production of coffee and castor beans, and ranks second in cacao. Production and export of both coffee and cacao are government-controlled. The most important agricultural products in 1949 were rice, 2,647,956 metric tons; cotton, 401,742 tons; wheat, 471,907 tons; cacao, 128,545 tons; sugar cane, 30,041,208 tons (raw sugar, 1,732,000 tons); and coffee, 1,031,501 tons. Other crops include tobacco, maize, manioc, fruits, bananas and coconuts. The total value of agricultural production in 1949 was about 38,819,355,000 cruzeiros.

Livestock is raised nearly everywhere, with the great centers in the central and southern states. There were 45,000,000 cattle in Jan., 1948. A hog plague killed hundreds of thousands of animals in 1946-47.

MANUFACTURING. Manufacturing is still primarily for domestic consumption, but industrialization is progressing rapidly, although hampered by equipment shortages.

The state of São Paulo is by far the leading industrial area. Leading products are foodstuffs, textiles, chemicals and pharmaceutical products, metallurgical products, clothing, leather, glass and porcelain, paper and rubber articles. The most important single industry is cotton weaving, employing approximately 25 per cent of all industrial labor.

Brazil's first steel plant, at Volta Redonda, began production on June 23, 1946. Production of pig iron and ferro-alloys in 1949 was 499,200 metric tons and steel, 615,400 tons.

Foreign trade, largely hemispheric, has

been retarded by scarcity of dollar exchange. Trade statistics for 3 years follow (in billions of cruzeiros):

	1947	1948	1949
Exports	21.18	21.70	20.15
Imports	22.79	20.98	20.65

In 1949, Brazil's chief customers were the U. S. 52 per cent, Britain 9 per cent and Argentina 8 per cent. Leading suppliers were the U. S. 34 per cent, Argentina 13 per cent and Britain 12 per cent. Chief exports in 1949 were coffee 57 per cent, cotton 9.9 per cent and cacao 4.7 per cent. Leading imports include machinery, foodstuffs (largely Argentine wheat), vehicles and petroleum products.

MINERAL RESOURCES. Brazil's vast mineral resources are among her least developed assets. The most important are coal (estimated reserves of 5,000,000,000 tons; estimated 1949 production, 2,128,858 metric tons) and iron ore, found chiefly in Minas Gerais (1948 output, 1,441,000 metric tons). Other important minerals, with estimated 1948 production, are manganese ore, 141,300 tons; gold, 157,000 troy ounces; diamonds, about 250,000 carats; tungsten, 1,144 tons; silver; bauxite; quartz crystals; uranium; chrome ore; graphite; petroleum and titanium.

FORESTS AND FISHERIES. More than half of Brazil's area is forested, but the extensive resources are relatively undeveloped. The largest single forest commodities are timber, chiefly pine from the southern states, and the wax of the carnauba palm, used for insulation and phonograph records and produced commercially only in Brazil (exports, 1949: 11,110 metric tons). Rubber production, mostly in the Amazon basin, was estimated in 1949 at 27,693 metric tons, but it has not developed as extensively as was once expected. Other forest products are Brazil nuts, yerba maté (Paraguay tea), medicinal plants, and vegetable oils. There are vast fishing banks and grounds in the rivers and along the coast, with some 2,500 known species of fish.

COMMUNICATIONS. Coastwise and river steamers are the main links between north and south Brazil, especially within the Amazon basin where inland waterways are the only means of land communication. Navigable waterways total 28,713 miles. Coastwise traffic is restricted to Brazilian ships, but the Amazon is open to all ships.

Railway mileage in 1948 was about 22,000, mostly located south of Recife. Railway development has been hampered by natural obstacles, especially by coastal mountains, but extensive government and private building is under way. Highways total 38,000 miles, and common roads about 124,000 miles. At the beginning of 1949, Brazil was served by 8 foreign and

23 domestic airlines; mileage flown by all airlines in 1949 totaled 50,239,000.

FINANCE. Recent data are as follows (in billions of cruzeiros):

	1948	1949*	1950*
Revenue	15,699	18,229	18,800
Expenditure	15,696	19,370	22,300

* Budget estimate.

TOPOGRAPHY. Brazil covers about three-sevenths of South America, extends 2,965 miles north-south, 2,691 miles east-west, and borders every South American state except Chile and Ecuador. Its area would more than blanket that of the U. S.

There are two principal physical divisions of the Brazilian surface. The lowlands are made up of the heavily forested tropical river basin of the Amazon, the world's largest drainage area; and the less heavily forested basin of the Plata to the south. The intermediate highland is a vast plateau, 1,000 to 3,000 feet above sea level, traversed by several low mountain ranges, and extending almost from the seacoast to the Bolivian frontier and south to the plains of Rio Grande do Sul. The Central

plateau comprises more than half of the country and, with the narrow coastal plain, supports 90 per cent of the population.

More than a third of Brazil is drained by the Amazon and its more than 200 tributaries. The Amazon is navigable for ocean steamers to Iquitos, Peru, 2,300 miles upstream. Southern Brazil is drained by the Plata system—the Paraguay, Uruguay and Paraná Rivers. The most important stream entirely within Brazil is the São Francisco, navigable for a thousand miles but broken near its mouth by the 260-foot Paulo Afonso Falls, with estimated potential 1,000,000 horsepower.

CLIMATE. Brazil is almost wholly in the torrid zone, but such factors as altitude, prevailing winds, rainfall and distance from the sea combine to vary the climate from tropical to temperate. Manaus on the Amazon has an average temperature of 80.9° and annual rainfall of 71.65 inches. The corresponding figures for Rio de Janeiro are 72.5° and 44 inches. February is usually the warmest month in Rio de Janeiro. In much of the Amazon basin, rainfall averages 80 inches.

United Kingdom of Great Britain and Northern Ireland

Area: 93,371 square miles (excluding Channel Islands and Isle of Man).

Population (est. Dec. 31, 1949): 50,519,000* (English, Scotch, Welsh, Irish).

Density per square mile: 541.1.*

Ruler: King George VI.

Prime Minister: Clement R. Attlee.

Principal cities (est. 1948): London (Greater), 8,367,000 (est. June 30, 1949, 8,390,941) (capital); Glasgow, 1,106,000† (seaport, shipbuilding); Birmingham, 1,099,850 (iron and steel); Liverpool, 767,990 (seaport); Manchester, 697,540 (textiles); Sheffield, 512,110 (steel, cutlery); Leeds, 497,340 (wholesale clothing); Edinburgh, 487,300† (capital, Scotland).

Monetary unit: Pound sterling.

Languages: English, Welsh, Gaelic.

Religion: Church of England (established church); Church of Wales (disestablished); Church of Scotland (established church—Presbyterian); Church of Ireland (disestablished); Roman Catholic; Methodist; Congregational; Baptist; Jewish.

* Including armed forces. † Est. Dec. 31, 1947.

HISTORY. Britain in 1950 continued its close co-operation with the United States through the North Atlantic pact and in the Korean war, at the same time solidifying its position in Western Europe in opposition to the U.S.S.R. At home the Labour regime moved cautiously after its near defeat in the Feb., 1950, parliamentary elections. Industrial production continued at a high level, but despite the devaluation of the

pound sterling, the nation (as well as the sterling area as a whole) still seemed unable to balance its accounts with the dollar area.

The history of Britain is obscure until the Roman invasions of the 1st century B.C. brought the islands into contact with the continent. When the Roman legions withdrew in the 4th century A.D., Britain fell easy prey to the invading hordes of Angles, Saxons and Jutes from Scandinavia and the Low Countries. Seven large kingdoms were established, and the original Britons were forced into Wales and Scotland. It was not until the 11th century that the country finally became united under the Danish King Canute. Following the death of Edward the Confessor (1066), a dispute as to the succession arose, and William Duke of Normandy invaded England, defeating the Saxon noble, Harold II, at the Battle of Hastings (1066). The Norman conquest was accompanied by the introduction of Norman law and feudalism, changing the customs of England.

The reign of Henry II (1154–89), first of the Plantagenets, saw an increasing centralization of royal power at the expense of the nobles, but in 1215 John (1199–1216) was forced to sign the Magna Carta, which awarded the people, especially the nobles, certain basic rights. Edward I (1272–1307) continued the conquest of Ireland, reduced Wales to subjection, and made some gains in Scotland. In 1314, however, English forces led by Edward II

THE COMMONWEALTH OF NATIONS

Europe

Political subdivision	Area (sq. mi.)	Population
United Kingdom	93,371	50,519,000 ^a
Channel Islands	75	101,000 ^a
Isle of Man	221	51,000 ^a
Gibraltar	2	23,700 ^a
Malta	122	313,722 ^a

Africa

Anglo-Egyptian Sudan	967,500	7,919,000 ^a
Basutoland	11,716	636,000 ^a
Bechuanaland	275,000	305,000 ^a
Gambia	4,074	251,000 ^a
Gold Coast (including Togoland)	91,843	4,118,450 ^a
Kenya	224,960	5,373,231 ^a
Mauritius and dependencies	807	456,717 ^a
Nigeria (including British Cameroons)	372,674	24,000,000 ^a
Northern Rhodesia	290,323	1,721,100 ^a
Nyasaland	47,949	2,231,000 ^a
St. Helena and dependencies	126	5,040 ^a
Seychelles	156	34,632 ^a
Sierra Leone	27,925	1,857,275 ^a
Somaliand	67,936	700,000 ^a
Southern Rhodesia	150,333	2,060,400 ^a
South-West Africa	317,725	352,075 ^a
Swaziland	6,705	193,000 ^a
Tanganyika Territory	362,688	7,074,160 ^a
Uganda	93,981	4,993,965 ^a
Union of South Africa	472,550	12,111,800 ^a
Zanzibar and Pemba	1,020	265,872 ^a

America

Bahamas	4,404	75,018 ^a
Barbados	166	207,262 ^a
Bermudas	19	36,771 ^a
British Guiana	89,480	414,306 ^a
British Honduras	8,598	65,354 ^a
Canada	3,619,616	13,845,000 ^a
Falkland Islands and dependencies	4,618	3,641 ^a
Jamaica and dependencies	4,722	1,402,292 ^a

America—(cont.)

Political subdivision	Area (sq. mi.)	Population
Leeward Islands	423	108,812 ^a
Trinidad and Tobago	1,978	618,603 ^a
Windward Islands	821	256,000 ^a

Asia

Aden colony	80	80,876 ^a
Aden protectorate	112,000	650,000 ^a
Bahrain Islands	213	125,000 ^a
Borneo:		
Colony of North Borneo	29,417	345,000 ^a
Brunei	2,226	40,657 ^a
Sarawak	50,000	546,385 ^a
Ceylon	25,332	7,297,000 ^a
Cyprus	3,572	479,915 ^a
Hong Kong	391	2,317,000 ^a
India, Republic of	1,209,000	347,340,000 ^a
Malaya:		
Malayan Federation	50,680	5,081,848 ^a
Singapore and dependencies	282	983,797 ^a
Pakistan	337,524	73,321,000 ^a

Oceania

Australia, Commonwealth of	2,974,581	7,911,806 ^a
Fiji	7,040	284,955 ^a
Gilbert and Ellice Islands	312	35,298 ^a
Nauru	8	2,873 ^a
New Guinea, Territory of	93,000	915,000 ^a
New Hebrides	4,633	50,000 ^a
New Zealand	103,416	1,902,460 ^a
Norfolk Island	13	938 ^a
Papua (British New Guinea)	90,540	300,000 ^a
Solomon Islands	11,458	94,865 ^a
Tonga (Friendly Islands)	250	46,870 ^a
Western Samoa	1,133	78,156 ^a

(Note: Each population figure is followed by superior number denoting the year of estimate: ^a for 1950, ^b for 1949, ^c for 1948, ^d for 1947, ^e for 1946, etc.)

were ousted from Scotland after the battle of Bannockburn. The late 13th and early 14th centuries saw the development of a separate House of Commons with tax-raising powers.

Edward III's claim to the throne of France led to the Hundred Years' War (1338-1453), which ended with the loss of almost all the large English territory in France. In England the great poverty and discontent caused by the war was intensified by the Black Death, a plague which reduced the population by about one-third. The Wars of the Roses (1455-85), a

struggle for the throne between the House of York and the House of Lancaster, were ended by the victory of Henry Tudor (Henry VII) at Bosworth Field (1485).

During the reign of Henry VIII (1509-47), the Church in England asserted its independence from the Roman Catholic Church. Under Edward VI and Mary, the two extremes of religious fanaticism were reached and it remained for Henry's daughter, Elizabeth (1558-1603), to settle the Church of England on a moderate basis. In 1588 the Spanish Armada, a fleet sent out by Catholic King Philip II of

Spain, was defeated by the English and destroyed during a storm. It was during Elizabeth's reign that England became a world power.

Elizabeth's heir was of the house of Stuart—James VI of Scotland—who joined the two crowns as James I (1603-25). The Stuart kings incurred large debts and were forced either to depend on Parliament for taxes or to raise money by illegal means. In 1642 war broke out between Charles I and a large portion of the Parliament; Charles was defeated and executed in 1649, and the monarchy was then abolished. The Puritan Commonwealth endured for ten years, but after the death (1658) of Oliver Cromwell, the Lord Protector, the government fell to pieces and Charles II was restored to the throne in 1660. The struggle between the King and Parliament continued, but Charles II knew when to compromise. His brother James II (1685-88) possessed none of his ability and was ousted by the Revolution of 1688, which confirmed the predominant position of Parliament. James' daughter, Mary, and her husband, William of Orange, now ruled jointly.

The reign of Queen Anne (1702-14) was marked by the Duke of Marlborough's victories over France at Blenheim, Oudenarde and Malplaquet in the War of the Spanish Succession. England and Scotland meanwhile were joined together by the Act of Union (1707). Upon the death of Anne, the distant claims of the elector of Hanover were recognized, and he became King of England as George I.

The 18th century was a period of gradual growth and change. At home the unwillingness of the Hanoverian kings to rule resulted in the formation by the King's ministers of a cabinet, headed by a prime minister, which directed all public business. Abroad the constant wars with France resulted in expansion of the British Empire all over the globe, particularly in North America and India. This imperial growth was checked by the revolt of the American colonies (1775-81).

The age-long struggle with France broke out again in 1793, and during the lengthy Napoleonic Wars, which ended at Waterloo (1815), England was pitted at one time against almost all of Europe.

The Victorian era, named after Queen Victoria (1837-1901), saw the growth of a democratic system of government which had begun with the Reform Bill of 1832. The two important wars in Victoria's reign were the Crimean War against Russia (1853-56) and the Boer War (1899-1902). The latter was the result of England's imperialist expansion in South Africa and was accompanied by enormous extension of her sway throughout Africa.

The reign of Edward VII (1901-10) was

marked by increasing uneasiness at home and abroad. Within four years after the accession of George V (1910), England entered World War I when Germany invaded Belgium. The nation was led by coalition cabinets headed first by Herbert Asquith and then (Dec., 1916) by the Welsh statesman, David Lloyd George. The years after the war were marked by labor unrest which culminated in the general strike of 1926. A Labour ministry formed early in 1924 by Ramsay MacDonald fell in October of that year. In 1929 a second Labour government was formed, but the world economic depression forced a change in 1931, and a national government was formed composed chiefly of Conservative members, although MacDonald remained prime minister until 1935. King Edward VIII succeeded to the throne in 1936 on his father's death but abdicated eleven months later (in order to marry an American, Wallis Warfield Simpson, whose second divorce was then pending) in favor of his brother, who became King George VI.

The efforts of Prime Minister Neville Chamberlain to meet by peaceful means the rising tide of Nazism in Germany failed with the German invasion of Poland (Sept. 1, 1939), which was followed by England's entry into World War II (Sept. 3, 1939). Serious Allied reverses in the spring of 1940 led to Chamberlain's resignation and the formation of another coalition war cabinet by Conservative leader Winston Churchill, who led England through most of World War II. Churchill resigned as the coalition leader shortly after V-E Day, but then formed a "caretaker" government which remained in office until after the parliamentary elections of July 5, 1945, in which the Labour party won an overwhelming victory. The government formed by Clement R. Attlee on July 26 embarked on a moderate socialistic program.

AREA AND POPULATION OF MAJOR SUBDIVISIONS* (Dec. 31, 1949)

Subdivision	Area	Population
England	50,870	43,946,000
Wales	7,469	
Scotland	29,794	5,204,000
Northern Ireland	5,238	1,369,000

* Not including Channel Islands and Isle of Man.

RULER. King George VI, born December 14, 1895, second son of King George V and Queen Mary, succeeded to the throne on the abdication of his brother, King Edward VIII, December 11, 1936; married April 26, 1923, to Lady Elizabeth Bowes-Lyon (born Aug. 4, 1900). Their children are: (1) Princess Elizabeth Alexandra Mary (heiress presumptive), born April 21, 1926; and (2) Princess Margaret Rose, born Aug. 21, 1930. Princess Elizabeth was married Nov. 20, 1947, to Prince Philip, Duke of Edinburgh,

Rulers of England

Anglo-Saxons¹

Name	Born	Ruled
Alfred the Great	849	871- 899
Edward the Elder	c. 870	c. 899- 925
Athelstan	895	925- 939
Edmund I	921	939- 946
Edred	c. 925	946- 955
Edwy the Fair	c. 943	955- 959
Edgar the Peaceful	943	959- 975
Edward the Martyr	c. 962	975- 979
Ethelred the Redeless	968	979-1016
Edmund II Ironside	c. 993	1016-1016

Danes

Canute	995	1016-1035
Harold I Harefoot	c. 1016	1035-1040
Hardicanute	c. 1018	1040-1042

Saxons

Edward the Confessor	c. 1004	1042-1066
Harold II	c. 1020	1066-1066

Normans

William I the Conqueror	1027	1066-1087
William II Rufus	c. 1056	1087-1100
Henry I	1068	1100-1135
Stephen	c. 1100	1135-1154

Plantagenets

Henry II	1133	1154-1189
Richard I Coeur de Lion	1157	1189-1199
John	1167	1199-1216
Henry III	1207	1216-1272
Edward I Longshanks	1239	1272-1307
Edward II	1284	1307-1327
Edward III	1312	1327-1377
Richard II	1367	1377-1399

House of Lancaster

Henry IV	1366	1399-1413
Henry V	1387	1413-1422
Henry VI	1421	1422-1461
		& 1470-1471

House of York

Name	Born	Ruled
Edward IV	1442	1461-1470
		& 1471-1483
Edward V	1470	1483-1483
Richard III	1452	1483-1485

House of Tudor

Henry VII	1457	1485-1509
Henry VIII	1491	1509-1547
Edward VI	1537	1547-1553
Jane (Lady Jane Grey)	1537	1553-1553
Mary I	1516	1553-1558
Elizabeth	1533	1558-1603

House of Stuart

James I ²	1566	1603-1625
Charles I	1600	1625-1649

Commonwealth

Council of State	—	1649-1653
Oliver Cromwell	1599	1653-1658
Richard Cromwell	1626	1658-1659

House of Stuart Restored

Charles II	1630	1660-1685
James II	1633	1685-1688
William III ³	1650	1689-1702
Mary II ³	1662	1689-1694
Anne	1665	1702-1714

House of Hanover

George I	1660	1714-1727
George II	1683	1727-1760
George III	1738	1760-1820
George IV	1762	1820-1830
William IV	1765	1830-1837
Victoria	1819	1837-1901

House of Saxe-Coburg

Edward VII	1841	1901-1910
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House of Windsor

George V	1865	1910-1936
Edward VIII	1894	1936-1936
George VI	1895	1936-

¹ Dates for Anglo-Saxon kings are still subjects of controversy.

² Ruled in Scotland as James VI (1567-1625).

³ Joint rulers (1689-1694).

born June 21, 1921; their children are Prince Charles of Edinburgh, born Nov. 14, 1948, and Princess Anne, born Aug. 15, 1950. The King's living brothers are Prince Edward Albert, Duke of Windsor (formerly King Edward VIII), born June 23, 1894, and Prince Henry William, Duke of Gloucester, born March 31, 1900.

NATIONAL GOVERNMENT. The United Kingdom is a constitutional monarchy, with a king and a Parliament consisting of two houses: the House of Lords with about 750 hereditary peers, 26 spiritual peers, 16 Scottish representative peers, a number of Irish representative peers (vacancies are no longer filled), and a few life peers who

have held high judicial office; and the House of Commons, numbering since 1950 625 members elected by practically universal suffrage. Supreme legislative power is vested in Parliament, which holds office for five years unless sooner dissolved. The executive power of the Crown is exercised by the Cabinet, headed by the prime minister. The latter, normally the head of the party commanding a majority in the House of Commons, is appointed by the sovereign, with whose consent he in turn appoints the rest of the Cabinet. All ministers must be members of one or the other house of Parliament; they are individually and collectively responsible to the Crown, the prime minister and Parlia-

ment. The Cabinet proposes bills and arranges the business of Parliament but it depends entirely on the votes of confidence in Commons. By an act passed in 1911, the lords cannot hold up "money" bills, but they can delay other bills for a period of two years.

By the Act of Union (1707) the Scottish parliament was assimilated with that of England, and Scotland is now represented in Commons by 71 members. The Secretary of State for Scotland, a member of the Cabinet, is responsible for the administration of Scottish affairs.

Parliamentary elections held in Feb., 1950 returned 315 Labour party, 298 Conservatives, 9 Liberals, 2 Irish nationalists and 1 non-party (the speaker). Labour party candidates received 13,295,736 votes, Independent Labour 4,112, Labour Independent groups 26,014; Conservative and Ulster Unionist 11,518,360, Liberals 2,621,489, Conservative and Liberal 124,642, Conservative and National Liberal 407,326, Liberal and Conservative 60,830, Communist 91,815, National Liberal 40,287, independents and others 65,033.

The members of the Cabinet after the elections of Feb., 1950, were Clement R. Attlee (Prime Minister, First Lord of the Treasury), Herbert Morrison (Lord President of the Council), Ernest Bevin (Secretary of State for Foreign Affairs), Hugh Gaitskell (Chancellor of the Exchequer), Hugh Dalton (Minister of Town and Country Planning), Lord Addison (Lord Privy Seal), Lord Alexander (Chancellor of the Duchy of Lancaster), Lord Jowitt (Lord Chancellor), James Chuter Ede (Secretary of State for the Home Department), Emanuel Shinwell (Minister of Defense), George A. Isaacs (Minister of Labour and National Service), Aneurin Bevan (Minister of Health), Thomas Williams (Minister of Agriculture and Fisheries), George Tomlinson (Minister of Education), Harold Wilson (President of the Board of Trade), James Griffiths (Secretary of State for the Colonies), Hector McNeill (Secretary of State for Scotland), Patrick Gordon-Walker (Secretary of State for Commonwealth Relations).

LOCAL GOVERNMENT. England and Wales are divided into 62 administrative counties, including the county of London, and 83 county boroughs. The counties are administered by the justices and by popularly elected county councils. All incorporated towns are administered by a municipal corporation consisting of the mayor, aldermen and burgesses. Local government in Scotland is comparable to that in England and Wales.

JUDICIARY. The ultimate British court of appeal is the House of Lords; the final court of appeal for certain of the Dominions is the Judicial Committee of the Privy Council. Below the House of Lords on the civil side is the High Court of

Judicature, divided into two parts, the Court of Appeal, and the High Court of Justice. On the criminal side is the Court of Criminal Appeal, which is the court of last resort barring the rare allowance of an appeal to the Lords. Actually these superior courts hear only a small fraction of the cases, and most of the trials are held in a complicated system of inferior courts, exercising original jurisdiction. The Lord Chancellor, Lord Chief Justice, Lords of Appeal in Ordinary (law members of the House of Lords), and Lord Justices of Appeal are appointed by the Prime Minister.

DEFENSE. Compulsory military service, introduced in May, 1939, is still in effect, and will continue until 1954 under the terms of National Service acts since passed. An act passed in 1950 makes 2 years' national service compulsory for men between 18 and 26. The armed forces are comprised of three separate services—the Army, the Royal Navy and the Royal Air Force. The Prime Minister retains supreme responsibility for defense, but the Minister of Defense has coordinating and executive duties.

Service ministers are no longer Cabinet members but continue to be members of the Defense Committee headed by the Prime Minister with the Minister of Defense as deputy chairman; this committee is responsible to the Cabinet both for the review of current strategy and for coordinating departmental action in preparation for war.

Military-budget estimates for the fiscal year 1950-51 follow:

	Estimate	Strength*
Navy	£193,000,000	127,500
Army	299,000,000	356,600
Air	223,000,000	198,000

* Projected strength, Apr. 1, 1951.

Control of the land forces is exercised by the Army Council, headed by the Secretary of State for War. Its members include the Chief of the Imperial General Staff, the Adjutant General and Quartermaster General.

The Royal Navy is controlled by the Board of Admiralty, headed by the First Lord of the Admiralty, who is responsible to Parliament. Other members include the First Sea Lord and Chief of Naval Staff. In Mar., 1950, the Royal Navy had in active service 5 fleet carriers, 14 cruisers, 34 destroyers, 27 frigates and 32 submarines. In reserve and in use for training were 5 battleships, 7 fleet carriers, 1 escort carrier, 12 cruisers, 79 destroyers, 138 frigates and 34 submarines. Nine fleet carriers, 3 cruisers and 8 destroyers were under construction.

Naval losses during World War II totaled 2,831 vessels, including 3 battleships, 2 battle cruisers, 5 fleet carriers, 3 auxiliary carriers, 23 cruisers, 139 destroyers and 76 submarines.

Control of the Royal Air Force is vested in an Air Council analogous to the Army Council and headed by the Secretary of State for Air. The Fleet Air Arm was transferred to the Royal Navy in 1937. The R.A.F. had approximately 6,000 planes in service in 1949-50.

The total strength of the armed forces on Aug. 31, 1939, was 681,000. Between that date and June 30, 1945, another 5,215,000 men were inducted. Of the total of 5,896,000, 923,000 served in the Royal Navy, 3,788,000 in the Army and 1,185,000 in the Royal Air Force. The Women's Auxiliary Forces added 619,000 to their 1939 strength of 21,000.

Research and development in the field of atomic energy and weapons is the responsibility of the Ministry of Supply.

EDUCATION. The school system in England and Wales has undergone considerable change since enactment of the Education Act of 1944. This measure makes primary and secondary training available for all children at public expense, with the secondary stage starting at the age of 11. The school-leaving age was raised from 14 to 15 on April 1, 1947. Statistics for the school year 1947-48 are as follows:

England and Wales: primary schools 23,811, pupils 3,832,138; secondary schools 4,592, pupils 1,543,576; special schools 537, pupils 33,061. Scotland (1946): primary schools 2,087, pupils 375,757; secondary 983, pupils 354,286. There are numerous private schools for both boys and girls.

In 1947-48, the 12 English universities and 6 university colleges had 56,315 students, the University of Wales, 4,654 and the 4 Scottish universities and one university college 15,795.

AGRICULTURE. Agriculture remains one of Britain's chief industries, employing more than 1,000,000 persons. In 1949, land under cultivation in the United Kingdom amounted to 18,360,000 acres; permanent grassland totaled 12,680,000 acres.

In Scotland more than two-thirds of the land devoted to agriculture is uncultivated rough grazings, while over two-thirds of the cultivated area is arable land; in England and Wales three-fifths of the cultivated land is under permanent grass and only one-sixth of the total agricultural land is rough grazings.

LEADING AGRICULTURAL PRODUCTS (in thousands)

	1948		1949	
	Acres	Long tons	Acres	Long tons*
Wheat	2,279	2,361	1,964	2,136
Barley	2,082	2,027	2,058	2,043
Oats	3,335	2,963	3,251	2,841
Sugar beets	413	4,319	420	3,788
Potatoes	1,547	11,798	1,309	8,898

* Provisional.

Livestock (June 30, 1949) included 10,229,000 cattle, 19,473,000 sheep, 2,811,000 hogs and 95,223,000 poultry. Cattle occupy a predominant position in British agriculture, accounting for about 40 per cent of the total farm output. Production of cheese (1949) was 35,000 long tons; butter (including farmhouse butter), 18,000; beef and veal, 499,400; mutton and lamb, 139,800; pork, bacon and ham (commercial), 172,700; wool, 35,900.

INDUSTRY. Great Britain is second only to the United States among the industrial nations of the world. The most important manufacture is heavy goods such as machinery, tools, bridges and locomotives; industry is concentrated in the north and Midlands of England. Sheffield is the center of the steel industry, while the china industry is concentrated in the Midlands. The cotton industry is centered in Lancashire; Liverpool, Manchester, Oldham, Preston and Bolton are the main manufacturing towns. The wool industry, England's oldest large trade, is located just east of the cotton towns, at Leeds, Bradford and Hull in Yorkshire. An important industrial region is the central Lowlands of Scotland, where woollens, silks, linens, cottons, lace, glass, paper, steel and pig iron are produced. Important shipyards are located along the coast. The 320 vessels of 1,267,467 gross tons launched in 1949 represented 40.5 per cent of the world total. On Mar. 31, 1950, 346 vessels of 1,895,219 tons were under construction in the United Kingdom. Steel production in 1949 was 15,552,900 long tons; that of pig iron, 9,498,500 tons.

Britain's last industrial census was taken in 1935, when the total value of manufactured products was \$13,907,300,000. The principal industries, in order of value of output in that year, were as follows: food, beverages and tobacco; engineering and transportation; textiles; metals; wood and paper products; chemicals; clothing. In Apr., 1948, there were 51,050 industrial establishments having more than 10 employees.

TRADE. The United Kingdom's economic prosperity is dependent on its foreign trade, and the nation has made great efforts in the postwar years to build up its volume of exports.

LEADING EXPORTS AND IMPORTS

(in millions of pounds sterling)

	Exports	1948	1949*
Vehicles, ships and aircraft		265.2	313.5
Machinery		232.9	278.7
Cotton yarns and manufactures		131.1	159.1
Iron and steel and manufactures		105.3	126.6
Woolen and worsted yarns and manufactures		95.3	104.2

* Provisional

Imports

	1948	1949*
Grain and flour	201.2	182.8
Dairy products	131.2	176.1
Oilseeds and nuts	143.9	171.6
Meat	125.9	146.1
Wool	88.5	129.6

* Provisional.

OVERSEAS TRADE

(Value in millions of pounds sterling)

	Imports	Exports	Re-exports
1938	919.5	470.8	61.5
1947	1,794.5	1,138.2	59.8
1948	2,078.0	1,581.8	64.7
1949*	2,272.5	1,784.4	58.6
1950†	603.6	515.8	17.8

* Provisional. † First three months.

DISTRIBUTION OF TRADE, 1947-49

(in millions of pounds sterling)

Chief Destinations of Exports

	1947	1948	1949*
Australia	71.9	144.7	188.6
South Africa	91.8	120.3	124.9
India	†	96.0	117.1
Canada	43.5	70.5	79.3
Ireland	56.0	75.7	71.7
New Zealand	43.2	62.5	64.5

Chief Sources of Imports

	1947	1948	1949*
Canada	233.3	217.0	224.6
United States	297.1	183.2	221.7
Australia	97.1	168.9	212.4
New Zealand	90.0	108.7	117.0
India	†	96.3	98.2
Denmark	27.0	42.2	77.7

* Provisional. † Comparable figures not available.

COMMUNICATIONS. The merchant marine on June 30, 1949, totaled 6,077 ships (100 tons and over) with a gross tonnage of 18,093,159—21.91 per cent of the world total and second only to the U. S. merchant fleet. Losses during World War II totaled 2,426 vessels of 11,331,933 gross tons.

Nationalization of the railway and canal systems in Great Britain became effective Jan. 1, 1948, and they are now operated by the government's Transport Commission. Railway mileage in the United Kingdom in 1948 was 19,700; in 1947, 1,139,-843,000 passengers and 257,340,000 long tons of freight were carried. The total length of public highways is 183,477 miles, of which 157,089 are in England and Wales and 26,388 in Scotland. In Feb., 1950, 11-censed motor vehicles numbered 3,833,000, of which 2,035,000 were cars and 778,000 trucks. Radio-receiving-set licenses in Apr., 1950, were 11,840,000; television sets, 364,-000. Telephones numbered 4,922,816 on Mar. 31, 1950, a total second only to that of the U. S.

British air services throughout the world are nationalized under the Minister of

Civil Aviation. Service is supplied by two public corporations—British Overseas Airways (BOAC) and British European Airways. In 1949, they flew respectively 27,688,-000 and 15,161,000 air miles.

FINANCE. Recent data are as follows (in millions of pounds):

	1948-49	1949-50	1950-51*
Revenue	4,006.6	3,924.0	3,897.8
Expenditure	3,152.8	3,356.6	3,455.1

* Budget estimate.

Notes in circulation on Mar. 29, 1950, totaled £1,267,251,366. The net deadweight debt on Mar. 31, 1950, was £25,187,000,000 (1949: £25,168,100,000; 1948: £25,620,762,-603; 1947: £25,630,644,900).

ESTIMATED REVENUE AND EXPENDITURE 1950-51

Estimated Revenue

Income tax	£1,388,000,000
Surtax	120,000,000
Death duties	195,000,000
Stamps	50,000,000
Profits tax and excess profits tax	270,000,000
Other inland revenue duties	500,000
Special contribution	4,500,000
Total inland revenue	£2,028,000,000
Customs	870,650,000
Excise	713,150,000
Total customs and excise	1,583,800,000

Motor vehicle duties	56,000,000
Total receipts from taxes	3,667,800,000

Surplus war stores	35,000,000
Surplus receipts from certain trading services	85,000,000
Wireless licenses	13,000,000
Receipts from sundry loans	27,000,000
Miscellaneous (including Crown lands)	70,000,000
Total estimated revenue	3,897,800,000

Estimated Expenditure

Consolidated fund:	
Interest and management of national debt	£490,000,000
Payments to Northern Ireland	
Exchequer	36,000,000
Misc. consolidated fund expenditures	11,000,000
Total consolidated fund	£537,000,000

Supply services: Defense		
Army	299,000,000	
Navy	193,000,000	
Air	223,000,000	
Ministry of Supply	65,000,000	
Ministry of Defense	820,000	
Total supply services		£780,820,000
Civil service:		
Central government and finance	20,336,000	
Foreign and imperial	80,019,000	
Home department, law and justice	57,751,000	
Education and broadcasting	270,051,000	
Health, housing, town planning, labor and nat'l insurance	845,673,000	
Trade, industry and transport	155,072,000	
Works, stationery, etc.	73,609,000	
Pensions	96,125,000	
Supply, food and miscellaneous	503,602,000	
Total civil service		2,102,238,000
Post office (excess over revenue)	641,000	
Tax collection	34,370,000	
Total estimated expenditure		3,455,069,000
Surplus	442,731,000	
Grand total		£3,897,800,000

TOPOGRAPHY AND HYDROGRAPHY. The United Kingdom, consisting of England, Wales, Scotland and Northern Ireland, is about one-third the size of Texas. England, in the southeast part of the British Isles, is separated from Scotland on the north by the granite Cheviot Hills; from them the Pennine chain of uplands extends south through the center of England, reaching its highest point in the Lake district in the northwest. To the west along the border of Wales—a land of steep hills and valleys—are the Cambrian Mountains while the Cotswolds, a range of hills in Gloucestershire, extend into the surrounding shires. The remainder of England is plain land, though not necessarily flat, with the rocky sand-topped moors in the southwest, the rolling downs in the south and southeast and the reclaimed marshes of the low-lying Fens in the east central districts. Scotland is divided into three physical regions—the Highlands, the Central Lowlands, containing two-thirds of the population, and the Southern Uplands. The western Highland coast is intersected throughout by long narrow sea-lochs or

fjords. Scotland also includes the Outer and Inner Hebrides and other islands off the west coast, and the Orkney and Shetland Islands off the north coast.

Wales is generally hilly; the Snowdon range in the northern part culminates in Mt. Snowdon (3,557 ft.), highest in either England or Wales.

In addition to the numerous inlets and bays of the coast, England has a group of lakes in the northwest which includes Windermere, Coniston, Derwentwater, Ullswater and Grasmere. Important rivers flowing into the North Sea are the Thames, Humber, Tees and Tyne. In the west are the Severn and the Wye, which empty into the Bristol Channel and are navigable, as are the Mersey and Ribble. Scotland has many picturesque lakes; its most important river is the Clyde.

CLIMATE. Although Great Britain lies in the same approximate latitude as Labrador, its climate is tempered by the westerly winds blowing off the warm Gulf Stream. The sea winds also prevent excessive summer heat. Rainfall is abundant, especially in the early fall. London's famed "pea-soup" fogs occur most frequently in November and March. It has been estimated that clouds, fogs or mists obscure the sun for approximately two-thirds of the daylight hours.

The mean annual temperature of England and Wales is about 50°; the west coast is somewhat warmer than the east. January is the coldest month (average about 40°) and July the hottest (about 61.5°). Highest July temperatures usually occur around London, where the mean is somewhat above 64°. Coldest months in the capital are December (about 38°) and January (about 39°). The mean annual rainfall in London is 23½ inches.

North of Birmingham, the summers are cool, and in Edinburgh the mean temperature in July is usually below 60°. Rainfall is less than in London.

MINERALS. Great Britain's most important mineral resource is coal, which was responsible to a large extent for British industrial supremacy during the late 18th and the 19th centuries. The coal mines were nationalized in 1946. Reserves have been variously estimated at from 150,000 million to 200,000 million tons. Prior to World War II, coal was exported in declining amounts to the continent, mainly to France, Sweden, Denmark and Italy. Since the war, however, exports have been negligible, and Britain has been hard put to meet her own minimum domestic requirements. Mineworkers numbered approximately 724,000 in 1948.

Most of the British iron ore is produced in England, especially in Cumberland, Lancashire and Staffordshire. Tin ore and

copper are obtained almost exclusively from Cornwall, while lead comes mainly from Flint, Durham and Derbyshire. Zinc occurs mainly in North Wales, the north of England, the Isle of Man and the county of Dumfries in Scotland. The whole British supply of china clay (kaolin)—of great importance in the ceramic, papermaking, bleaching and chemical industries—comes from Cornwall. Petroleum production is negligible, but oil shale exists in large quantities.

MINERAL PRODUCTION, 1948 and 1949 (in thousands of short tons)

	1948	1949*
Coal	233,429 †	240,688 †
Iron ore	14,660	14,980
Superphosphates	1,103.6	1,123.7
Zinc (smelter)	80.3	71.7

* Provisional. † Excluding Northern Ireland.

The most important potential sources of water power are in the highlands of Scotland, North Wales and Cumberland. Electricity generated in England, Scotland and Wales averaged 4,093,000,000 kwh monthly in 1949 and 4,795,000,000 kwh monthly in the first four months of 1950. Gas manufacture averaged 1,237,000,000 cu. m. monthly in 1949. Nationalization of the electric and gas industries became effective in 1948.

FORESTS, FISHERIES. Great Britain was once heavily forested, but centuries of timber cutting and clearing have denuded the country of the original forests. Woodland of all types approximates 3,000,000 acres, and barely 40 per cent of Britain's surface is covered with timber. Consequently the nation is heavily dependent on imported timber.

Great Britain's sea fishing industry is among the most important in the world. The principal kinds of fish caught are herring, cod, haddock, plaice and hake, classed as wet fish, and, among shellfish, oysters, crabs and lobsters. The most important factor in the export trade is salted herring, which ordinarily represents about 70 per cent of the total. The principal grounds frequented by British fishermen are the North Sea; off Iceland; the Faeroes; south of Ireland; west of Scotland; west of Ireland; the Irish Sea and English Channel. The catch of wet fish in 1949 was 1,007,633 long tons valued at £39,987,817; about 40,000 men are regularly employed.

NORTHERN IRELAND

(Part of United Kingdom)

Area: 5,238 square miles.

Population (est. 1949): 1,369,000.

Density per square mile: 261.4.

Governor: Vice Admiral the Earl Granville.

Prime Minister: Sir Basil S. Brooke.

Principal cities (est. 1948): Belfast, 450,000 (capital); Londonderry, 49,000 (clothing).

Monetary unit: Pound sterling.

Language: English, Gaelic.

Religions (census 1947): Roman Catholic, 33.7%; Presbyterian, 31.4%; Church of Ireland, 26.9%; others, 8.0%.

Northern Ireland comprises the six predominantly Protestant counties of Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone (collectively known as Ulster), which form the northern part of the island of Ireland. The area is an integral part of the United Kingdom, but under the terms of the Government of Ireland Act (1920) it has a semi-autonomous government, which has steadfastly refused to reconsider a decision made in 1922 not to associate itself in any sort of union with the rest of Ireland. This policy was endorsed overwhelmingly by voters in the 1949 elections.

The government has only limited powers for local purposes, and many matters are reserved to the central government at Westminster. Executive authority is vested in the Crown-appointed governor who is advised by a cabinet of eight ministers headed by the prime minister. The parliament consists of the House of Commons of 52 members elected for 5-year terms, and the Senate of 26 members elected by the House of Commons. The general elections of Feb. 10, 1949, returned 37 Unionists, 9 Nationalists, and 6 representatives of other groups to the House. The area is also represented by 12 members in the British Parliament at London.

Agriculture is the largest single industry; about two-thirds of the country is devoted to crops and pasture under a system of mixed farming. The leading crops include potatoes, oats and flax. In 1949 there were 980,000 cattle, 645,000 sheep and 458,000 hogs.

The two principal manufacturing industries are linen and shipbuilding, both centered in Belfast. The linen industry was established by Huguenot weavers who fled France after the revocation of the Edict of Nantes in 1685.

On March 31, 1950, 15 ships of 185,600 tons were under construction at Belfast.

Expenditure for the fiscal year 1949-50 was estimated at £44,995,000, and revenue at £65,057,000, of which £20,000,000 represented Northern Ireland's "contribution" to the British treasury. Most of the taxes are collected by the United Kingdom government.

In 1947-48 there were 1,656 primary schools (up to 11 years) in Northern Ireland, with enrollment of 185,418, and 77 secondary schools with enrollment of 21,973. Students at the Queen's University (Belfast) numbered 2,685.

The topography of Northern Ireland is somewhat similar to that of the rest of the island, with two ranges (Donegal and Sperrin) and an extensive plateau (Antrim) in the northeastern part. Mineral resources are limited to deposits of basalt, clay, sandstone and granite. Fishing is an important industry, off the coast and in the numerous lakes and rivers which abound in salmon, eels and trout. Lough Neagh, covering about 153 square miles, is the largest lake in the British Isles.

The climate is comparable to that of the rest of the United Kingdom, although somewhat more equable. The highest mean summer temperature is about 59° in July, and the mean winter temperature rarely falls below 40°. Most of the comparatively light rainfall occurs in the autumn.

ISLE OF MAN

Lieutenant Governor: Air Vice Marshal Sir Geoffrey R. Bromet.

Located in the Irish Sea, equidistant from Scotland, Ireland and England, the Isle of Man is administered according to its own laws by a government composed of the lieutenant governor (appointed by the Crown), a legislative council of 11 members, and a House of Keys of 24 elected members, one of the most ancient legislative assemblies in the world. All sitting together constitute the court of Tynwald, which controls revenue and has executive power. Acts of the British Parliament do not affect the island unless it is specifically named.

Agriculture and fishing are the principal industries. The island is a popular English summer resort.

CHANNEL ISLANDS

Lieutenant Governor of Jersey: Lt. Gen. Sir Arthur E. Grasset.

Lieutenant Governor of Guernsey: Lt. Gen. Sir Philip Neame.

This group of islands, lying in the English Channel off the northwest coast of France, is the only portion of the Duchy of Normandy belonging to the English Crown, to which it has been attached since the conquest of 1066. It was the only British possession occupied by Germany during World War II.

For purposes of government the islands are divided into Jersey (45 sq. mi.) and the bailiwick of Guernsey (24 sq. mi.), including Alderney (3 sq. mi.), Sark (2 sq. mi.), Herm and Jethou. The islands are administered according to their own laws and customs by local governments headed by Crown-appointed lieutenant governors. Acts of Parliament in London are not binding on the islands unless they are specifically mentioned.

The two main sources of income for the

population are agriculture, especially stock-raising, and the tourist trade. French is still the official language, although English is the main language of commerce and most government functions.

GIBRALTAR—Status: Colony.

Governor: Gen. Sir Kenneth Anderson.

Gibraltar, at the south end of the Iberian Peninsula, is a rocky promontory commanding the western entrance to the Mediterranean. Aside from its strategic importance, it is also a free port, naval base and coaling station. It was captured by the Arabs crossing from Africa into Spain in A.D. 711. In the 15th century it passed to the Moorish ruler of Granada and later became Spanish. It was captured by an Anglo-Dutch force in 1704 during the War of the Spanish Succession and passed to Britain by the Treaty of Utrecht in 1713. Most of the inhabitants are of Spanish, Italian and Maltese descent. There are no important industries. Gibraltar's climate is equable, with summer temperatures averaging about 84° maximum. Mean annual temperature is 64.4°.

MALTA—Status: Self-governing colony.

Capital: Valletta (population, 21,693).

Governor: Sir Gerald Creasy.

Prime Minister: Enrico Mizzi.

Foreign trade (1949): exports £288,667; re-exports £716,658; imports £15,243,767. Chief exports: potatoes, onions.

Agricultural products: potatoes, onions, cereals, fruits.

The Maltese islands lie between Europe and Africa, in the central channel linking the eastern and western Mediterranean. The inhabited islands are Malta (95 sq. mi.), Gozo (26 sq. mi.) and Comino (1 sq. mi.). The Knights of St. John (Malta), who obtained the islands from Charles V in 1530, reached their highest fame when they withstood an attack by superior Turkish forces in 1565. Napoleon seized the island in 1798, but the French forces were ousted by British troops in 1799, and British rule was confirmed by the Treaty of Paris (1814). The principal importance of Malta is its strategic location as a naval base; it was heavily attacked by German and Italian aircraft during World War II but was never invaded by the Axis. Most of the population are Maltese, speaking the Phoenician Maltese language, a tongue akin to Syriac and Arabic. The islands are densely populated (2,571 per sq. mi.) and are heavily dependent on imports of food-stuffs.

Under its 1947 constitution, Malta enjoys a measure of self-government. The locally-elected assembly has complete control over domestic affairs, but the British government keeps control over matters dealing with defense and foreign affairs.

The climate is temperate and healthful. Annual mean temperature is 64.5°, with

June-September the hottest months and December-February the coldest (56°). Rainfall is irregular.

AFRICA

ANGLO-EGYPTIAN SUDAN (See EGYPT).

BRITISH SOUTH AFRICAN PROTECTORATES.

High Commissioner: Sir Evelyn Baring.

The three British protectorates in southern Africa—Basutoland, Bechuanaland and Swaziland—are not part of the Union of South Africa, but are administered by a High Commissioner responsible to the Secretary of State for Commonwealth Relations in the British cabinet. He also holds the office of High Commissioner for the United Kingdom in the Union of South Africa.

BASUTOLAND—Status: Protectorate.

Capital: Maseru (population 3,383).

Resident Commissioner: A. D. Forsyth Thompson.

Foreign trade (1948): exports £1,336,269; imports £1,807,246. Chief exports: wool, mohair.

Agricultural products: corn, wheat, sorghum.

Basutoland is a mountainous enclave surrounded by the Union of South Africa and bounded by the Orange Free State, Cape Province and Natal. It was constituted a native state under British protection by a treaty signed with the native chief Moshesh in 1843. It was annexed to Cape Colony in 1871, but on Mar. 13, 1884, was restored to direct control by the Crown. The resident commissioner is advised by a council of 100, of whom 95 are nominated by the native chiefs who administer the affairs of their tribes.

The population is restricted almost entirely to the lowland strip in the west; the white population (1,676 by the last census, in 1946) consists solely of officials, missionaries, traders and a few labor agents for employers in the Union of South Africa. About 100,000 natives are regularly employed in the Union. Sheep raising is highly developed. Land is the common property of the nation, held in trust by the chiefs. There are no European farmers.

The climate is dry and variable; temperatures range from 11° to 93°. Rainfall also is variable, but is heaviest during the summer; it averages about 30 inches annually.

BECHUANALAND—Status: Protectorate.

Capital: Mafeking, in Cape Province (population 4,666).

Resident Commissioner: A. Sillery.

Foreign trade: included in South African customs union. Chief export: pastoral products.

Agricultural products: hides and skins, cattle, butter, millet, maize.

Minerals: gold and silver (1947 value: £63,817).

Bechuanaland lies in south central Africa, bounded on the south and southeast by the Union of South Africa, on the west by South-West Africa, on the north by Angola and Northern Rhodesia and on the northeast by Southern Rhodesia. Its average elevation is 3,300 feet and the greater part is gently undulating. The area was placed under British protection on Sept. 30, 1885, to prevent further Boer encroachment and has since remained a British protectorate. The form of government is similar to that of Basutoland.

Most of the inhabitants are Bantu, but there were 2,325 Europeans in 1946, a few of them farmers. The country is essentially pastoral, with cattle raising and dairy farming the chief industries. Gold is mined in the Tati district near Francistown. There is also some mining of silver and copper. Timber is produced for use as fuel and pit props.

The summers are intensely hot; winters (May-August) are pleasant. Rainfall occurs mostly between December and May, and dust storms are frequent.

SWAZILAND—Status: Protectorate.

Capital: Mbabane (population 1,600).

Resident Commissioner: E. B. Beetham.

Foreign trade: included in South African customs union. Chief exports: cattle, asbestos.

Agricultural products: cattle, hides and skins, butter, tobacco, corn, millet.

Minerals: asbestos, tin, gold.

Swaziland lies at the southeastern corner of the Transvaal. It is largely hilly, with an average elevation of 4,000 feet in the west. It came under the protection of the Transvaal Republic in 1894 but was made a British protectorate in 1906 under the high commissioner for South Africa.

The natives are mostly Swazi; there were 3,204 Europeans in 1946, mostly farmers. Grazing is the principal native occupation; there is excellent pasture in the high land to the west. Tropical and subtropical crops are raised in the lower areas. Tin is mined near Mbabane. The country is dependent on road transport, by motor, oxen or mule.

Rainfall is moderate throughout the protectorate and is heaviest in summer. Average temperature ranges from about 65° in July to 80° or more in January.

GAMBIA—Status: Colony and protectorate.

Capital: Bathurst (population 21,152).

Governor: Percy Wyn Harris.

Foreign trade (1948): exports, £1,727,519; imports, £1,938,124. Chief export: peanuts (1948: 68,934 tons).

Agricultural products: peanuts, hides and skins, millet, rice, palm kernels.

Gambia, smallest of the British West African dependencies, is a stretch of land 200 miles long on both sides of the lower

Gambia River, surrounded on all land sides by French West Africa and fronting on the Atlantic Ocean. During the 17th century it was settled by various companies of English merchants; slavery was the chief source of revenue until it was abolished in 1807. Gambia became a Crown colony in 1843. Except for the island of St. Mary, on which the capital stands, the area is administered as a protectorate.

The inhabitants, mostly Negroes or negroids, are predominantly Mohammedan. The principal economic activity is the cultivation of peanuts. Internal transportation is by steamer and launch. Temperatures are fairly regular throughout the year, ranging from about 60° to 85°. Maximum rainfall is in August and September.

GOLD COAST—Status: Colonies (Gold Coast Colony, 23,937 square miles; Ashanti, 24,379 square miles); protectorate (Northern Territories, 30,486 square miles); U. N. trust territory (Togoland, 13,041 square miles).

Capital: Accra (population 135,456).

Governor: Sir Charles Arden-Clarke.

Foreign trade (1948): exports (including specie), £30,840,492; imports (excluding specie), £29,158,749. Chief exports: cacao, gold.

Agricultural products: cacao (1949–50: 540,000,000 lb.), copra, palm kernels.

Minerals: gold (1948: 672,000 oz.); manganese (640,100 metric tons), silver, diamonds.

Early a center of the slave trade and of Anglo-Dutch rivalry, the Gold Coast, stretching along the Gulf of Guinea for 370 miles, became a British possession in 1871. Ashanti, in the interior, became a protectorate in 1896 and was annexed in 1901. The Northern Territories, to the north of Ashanti, were made a protectorate in 1901. The area is administered by a governor with an executive council and a legislative council with an elected majority of Africans.

Ashanti and the Northern Territories are administered by Chief Commissioners responsible to the governor. Togoland, formerly German, was divided into French and British spheres and placed under League of Nations mandate after World War I and under U. N. trusteeship on Dec. 13, 1946.

Except for 6,773 non-Africans (1948), the population is all Negro. The main native industry is the cultivation of cacao, in the production of which the colony leads the world. The climate on the coast is hot and humid, ranging on the average from 78° to 80°. Rainfall is chiefly from March to July and from September to October.

KENYA—Status: Colony and protectorate.

Capital: Nairobi (pop. 1948: 119,489).

Governor: Sir Philip E. Mitchell.

Foreign trade (1949): exports, £10,964,134; re-exports, £18,209,570; imports, £54,123,277. Chief exports: sisal (26%), coffee, hides.

Agricultural products: coffee, tea, pyrethrum, sugar cane, sisal, corn, cotton, hides and skins.

Minerals: gold (1949: 20,100 oz.), sodium carbonate, silver, salt.

Forest products: wattle bark and extract, timber.

Kenya extends along the Indian Ocean between Ethiopia and Tanganyika Territory and westward to Lake Victoria and Uganda. Formerly known as the East Africa Protectorate, it was held under a concession from the Sultan of Zanzibar by the Imperial British East Africa Company from 1888 to 1905. It became a Crown colony in 1920, the coastal strip leased from the Sultan of Zanzibar becoming a protectorate.

The colony is predominantly agricultural, and a large area is cultivated by Europeans. Altitude ranges from sea level to more than 9,000 ft.; hence, the cultivation of tropical, subtropical and temperate crops is possible. Non-natives (1948) included 29,500 Europeans, 23,900 Arabs and 90,900 British Indians.

The coastal zone of Kenya is hot and humid; February to April are the hottest months, with a mean temperature of 82° at Mombasa. June and July are coolest (76° at Mombasa). The yearly average rainfall is about 48 inches. In the interior highlands the climate is temperate, and the rainfall comparatively heavy. Yearly average temperatures at Nairobi are 60° to 66°.

MAURITIUS—Status: Colony.

Capital: Port Louis (population 72,788).

Governor: Sir Hilary Blood.

Foreign trade (1949): exports, including re-exports, 163,072,000 rupees; imports, 153,140,000 rupees. Chief export: sugar (95%).

Agricultural products: sugar (1949: 416,000 metric tons), copra, tobacco.

Mauritius is a mountainous island of volcanic origin in the Indian Ocean, about 500 miles east of Madagascar. It was seized in 1810 from the French, who had settled it in 1715, and was formally ceded to Great Britain by the Treaty of Paris (1814).

With almost 600 persons per square mile, the island is one of the most densely populated regions in the world. The population has a large white element, chiefly French and British, but British Indians are predominant. There are many half-castes. The leading industry is sugar cultivation.

The climate is pleasant during the cool season, but extremely hot from December to April (90° to 96° at Port Louis). During this period there are also frequent torrents of rain and occasional severe cyclones.

NIGERIA—Status: Colony and protectorate.

Governor: Sir John S. Macpherson.

Principal cities (est. 1947): Ibadan, 400,000 (native metropolis); Lagos, 176,000 (capital); Kano, 90,000 (textiles, leather goods, cattle).

Monetary unit: British pound.

Languages: Native tongues, Arabic, English.

Religions: Mohammedan, Pagan, Christian.

Nigeria, with an area twice that of California, is situated on the Gulf of Guinea in West Africa. It was visited by European traders and explorers in the 16th and 17th centuries, and by the end of the 18th century British operators had a virtual monopoly in the area. Between 1879 and 1914, a series of private colonial developments by the British, together with reorganizations of the Crown's interest in the region, resulted in the formation of Nigeria as it exists today. During World War I, native troops of the West African frontier force joined with French forces to defeat the German garrison in the Cameroons. The Cameroons, a narrow strip along Nigeria's eastern border, became a League mandate after World War I, divided between France and Britain. Today the British Cameroons, a U. N. trust territory, is attached to Nigeria for administrative purposes.

The governor of Nigeria, named by the British Crown, heads the administration of the colony, which (including the Cameroons) is divided into four sections, each composed of several provinces. The custom of rule by native regimes, advised by British residents, is effected locally wherever practicable. Under the 1947 constitution all legislative bodies have elected non-European majorities, but the governor has an absolute veto.

The vast majority of the population is Negro, although in the north there has been an admixture caused by invasions of Fula, Berber and Arab or Arabized people. Mohammedanism is the dominant religion, but Christian missionary societies are active.

Most of the people are agriculturists. The staple food crops are durra (guinea corn), millet, yams, bananas and maize. Among the leading export crops are cacao (1949-50 production: 100,000 short tons), peanuts (1948 production: 616,000 tons), rubber (1949 exports: 7,900 tons) and palm kernels and oil. Hides and skins are also important export items. Aside from small native industry, there is no manufacturing.

Most external trade is with Britain. Domestic exports in 1948 totaled £35,899,805; imports, £40,600,976; re-exports, £1,586,354 (all figures exclude bullion, specie and currency). Chief exports were cacao (20%), peanuts, palm kernels and oil and tin ore. There is a substantial internal trade;

Kano is a busy terminal for caravan routes. The Niger and several other rivers are navigable; otherwise, the 1,901 miles of railway are the chief means of transportation. Highway mileage totals about 21,000. The main ports, except Lagos, are on rivers. Air service is supplied by BOAC, Air France and other international lines.

Nigeria is a leading tin producer—9,900 tons in 1949—from mines on the Bauchi plateau. Other minerals are coal, gold, lead, silver and tungsten. Over half the area is forested, but forest resources are comparatively unexploited. Mahogany is the main timber export, followed by cedar and walnut. Gum arabic is also exported.

Extending from twenty to sixty miles inland from the coast is the swampy Niger delta region, gradually giving way to hilly forest land. The larger part of the colony belongs to the great African plateau which, in Nigeria, reaches a maximum height of 3,000 feet. All of the colony lies within the tropics, but the climate varies from tropical in the south to near temperate on some parts of the plateau. In the south the temperature varies between 70° and 100°, and averages upwards of 80°.

NORTHERN RHODESIA—Status: Colony.

Capital: Lusaka (population 2,396).

Governor: Sir Gilbert Rennie.

Foreign trade (1948): exports, £23,129,623; imports, £16,098,874. Chief export: copper (about 75 per cent).

Agricultural products: tobacco, maize, wheat.

Minerals: copper (1948: 213,616 long tons), cobalt, vanadium, lead, zinc.

Northern Rhodesia is in south central Africa, bounded on the north by the Belgian Congo and Tanganyika Territory, on the east and southeast by Nyasaland and Mozambique, on the southeast and south by Southern Rhodesia and Bechuanaland, and on the west by Angola. Much of the country consists of high plateau, with the Congo-Zambezi watershed rising in places to 5,000 feet. Rhodesia was assigned in 1889 to the British South Africa Company, headed by Cecil Rhodes. Administrative control was transferred to the Crown on Apr. 1, 1924.

Native tribes number from 50 to 80; there were 28,800 Europeans in 1948. More than 3,000,000 acres are owned and occupied by Europeans. Metals constitute almost all exports by value. Lead and zinc deposits occur at Broken Hill; copper at Bwana M'Kuba. The main line of the Rhodesia railway crosses the northern part of the colony from Livingstone to the Congo border. A number of rivers are navigable.

Average temperature in the south ranges from about 65° in July to 80° or more in October. The rainfall occurs principally between November and April.

NYASALAND—Status: Protectorate.

Capital: Zomba (pop. 1949: 7,526).

Governor: Sir Geoffrey F. T. Colby.

Foreign trade (1949): exports and re-exports, £4,849,275; imports, £5,721,925. Chief exports: tobacco (65%), tea.

Agricultural products: tobacco (1949: 12,625 short tons), tea, cotton.

Nyasaland, a British protectorate since 1891, is a narrow area lying between Mozambique, Northern Rhodesia and Tanganyika Territory along the southern and western shores of Lake Nyasa. Agriculture is the chief occupation, both of the European settlers and natives. Europeans numbered 2,500 in 1947.

Lake Nyasa furnishes the principal transportation facility. Mineral and forest resources are limited.

The climate is extremely humid along the shores of Lake Nyasa, although the temperature rarely rises above 95°. In the highlands, above 3,000 feet, average temperatures are considerably lower. The dry season, from May to September, is comparatively cool.

ST. HELENA—Status: Colony.

Capital: Jamestown (population 1,547).

Governor: Sir George A. Joy.

Foreign trade (1949): exports (domestic), £106,881; imports, £135,080. Chief exports: flax fiber and tow.

Agricultural products: flax, potatoes.

St. Helena is a volcanic island (47 sq. mi.) in the South Atlantic about 1,200 miles from the west coast of Africa. It is famous as the place of exile of Napoleon (1815–21). It was taken for Britain in 1651 by the British East India Company and became a Crown colony in 1833. Attached to it are Ascension Island (34 sq. mi.), 800 miles northwest, and the Tristan da Cunha group (45 sq. mi.), about 1,500 miles southwest. Most of the inhabitants are of mixed European, East Indian and African descent. Ascension was an Allied air base in World War II.

Although St. Helena is in the tropical zone, its climate is temperate and healthful; the temperature varies from 68° to 84° in summer and 57° to 90° in winter.

SEYCHELLES—Status: Colony.

Capital: Victoria (population 9,497).

Governor: Dr. Percy S. Selwyn-Clarke.

Foreign trade (1949): exports (domestic), 5,421,350 rupees; imports, 5,109,430 rupees. Chief export: copra (80%).

Agricultural products: cinnamon, patchouli oil, coconuts, maize, sugar cane.

This archipelago of about 92 islands in the Indian Ocean was seized from France by British troops in 1794 and was ceded to Great Britain by the Treaty of Paris in 1814. The principal island is Mahé (55 sq. mi.), about 600 miles northeast of Madagascar. The climate of the archipelago is temperate and healthful.

SIERRA LEONE—Status: Colony and protectorate.

Capital: Freetown (population: 64,576).

Governor: Sir George Beresford-Stooke.

Foreign trade (1949): exports (excluding diamonds), £4,703,582; imports, £6,171,910. Chief exports: palm kernels and oil, iron ore, diamonds, kola nuts.

Agricultural products: palm kernels and oil, rice, millet, cassava, rubber.

Minerals: diamonds (1949: 537,397 carats); iron ore (1947: 840,636 long tons), gold.

Forest products: palm kernels, piasava.

Sierra Leone lies on Africa's west coast between French Guinea and Liberia. It is a well-watered hilly country but has a low swampy coastland with an extremely unhealthy climate. The coastal area (colony proper) was ceded to English settlers in 1788 as a home for Negroes discharged from the British armed forces and also for runaway slaves who had found asylum in London. The British protectorate over the hinterland was proclaimed in 1896. It was not until 1928 that slavery was totally abolished in the protectorate.

Freetown is the best harbor on the west coast.

SOMALILAND—Status: Protectorate.

Administrative Center: Hargeisa (population 17,500).

Governor: Sir Gerald Reece.

Foreign trade (1947–48): exports, £480,812; imports, £1,130,237. Chief export: hides and skins.

Agricultural products: cattle, hides and skins, grains.

Forest products: gums and resins.

British Somaliland extends along the Gulf of Aden for about 400 miles and inland for 80 to 220 miles. The interior is an elevated plateau falling in steep escarpments to the coastal plain. It came under Egyptian influence in 1875, but during the years 1884–86 treaties guaranteeing British protection were signed with the various Somali chiefs. Italian troops occupied the protectorate in 1940, but it was retaken by British troops in 1941. Both executive and legislative power is exercised by the governor.

Most of the inhabitants are nomadic Somalis of Mohammedan faith. Their principal activity is stock raising. The climate is extremely hot and arid, with rainfall in the coastal areas averaging less than 8 inches. The average temperature at Berbera, on the coast, is 77° in January and about 98° in July.

SOUTHERN RHODESIA—Status: Self-governing colony.

Capital: Salisbury (population: 61,760).

Governor: Maj. Gen. Sir John N. Kennedy.

Prime Minister: Sir Godfrey M. Huggins.

Foreign trade (1949): exports, £29,621,000; imports, £54,586,000; re-exports, £4,901,000. Chief exports: tobacco (37%), gold, asbestos.

Agricultural products: tobacco (1948-49: 83,608,000 lb.), corn, peanuts, meat, hides and skins.

Minerals: gold (1949: 528,180 oz.), asbestos (80,000 short tons), coal, chrome ore.

Southern Rhodesia is located between Northern Rhodesia, Bechuanaland, the Union of South Africa and Mozambique in south central Africa; it is part of the great South African plateau. The Zambezi River separates Northern and Southern Rhodesia. About two-thirds of the area is covered by trees and shrubs.

The country was settled in 1890 by the British South Africa Company, led by Cecil Rhodes. With the expiration of the company's charter, the white residents voted (1922) in favor of a responsible government of their own, and on Sept. 12, 1923, the country was annexed to Britain.

Southern Rhodesia's constitutional position is midway between that of a colony and a dominion. It has responsible government and a popularly elected Legislative Assembly of 30 members, but control of foreign relations and certain other matters is reserved to the U. K. government.

Most of the inhabitants are natives, but the country is well-adapted to European settlers, who in 1950 numbered 122,000. In addition there were 8,400 Asiatics and half-castes. Mining is the basis of the economy. Farming ranges from ranching to tobacco growing, but mixed farming is becoming more common. Conditions for cattle raising and dairy farming are especially favorable. Manufacturing is of growing importance, with the factories producing goods valued at \$23,679,000 in 1948. The colony is well served with railways (1,361 mi.), roads (4,000 mi.) and airlines.

The hottest month is October (mean maximum 85.2°); the coolest are June, July and August, when frost is likely to occur. Generally the days are hot throughout the year, and the nights are frequently cool. Rainfall is greatest in October, November and December.

SOUTH-WEST AFRICA (See UNION OF SOUTH AFRICA)

SWAZILAND (See BRITISH SOUTH AFRICAN PROTECTORATES)

TANGANYIKA TERRITORY—Status: U. N. trust territory.

Capital: Dar es Salaam (pop. 1948: 69,227).

Governor: Sir Edward F. Twining.

Foreign trade (1949): exports, \$19,233,150; re-exports, \$1,491,835; imports, \$27,576,110. Chief exports: sisal (55%), cotton, coffee.

Agricultural products: sisal (1949: 123,300 long tons), cotton, coffee, peanuts, sugar cane, tobacco, tea.

Minerals: diamonds (1949: 191,800 carats), gold (1949: 69,000 oz.).

Forest products: gum arabic and copal (1947 exports: 1,554 tons), beeswax, timber.

Tanganyika Territory, with the Belgian Ruanda and Urundi, constituted German East Africa from 1884 until 1919. It was administered under League of Nations mandate by Britain until 1946, when it was placed under United Nations trusteeship, with Britain as the administering power.

Tanganyika's narrow coastal plain is bordered on the west by the precipitous eastern side of the Central African plateau. Mount Kilimanjaro (19,565 ft.) is the highest point on the African continent. The territory also includes adjacent islands in the Indian Ocean.

The territory is sparsely populated; about two-thirds of the total area is uninhabited. In 1948 there were 16,100 Europeans and 59,300 Asiatics. It is the world's largest producer of sisal hemp. Most of the hemp, which is of the highest grade, is grown in the drier parts of the coast belt under European supervision. Stock raising is also important, but its progress is hampered by prevalence of the tsetse fly. A large diamond vein was discovered at Shinyanga in 1946.

The climate generally is hot and humid on the coastal areas, with the temperature averaging 80° at Dar es Salaam. Rainfall in the capital averages 60 inches. Inland the rainfall and temperature are lower.

UGANDA—Status: Protectorate.

Capital: Entebbe (population 7,321).

Governor: Sir John Hall.

Foreign trade (1949): exports, \$23,433,182; re-exports, \$372,140; imports, \$12,817,633. Chief exports: cotton (74%), coffee.

Agricultural products: cotton, coffee, sugar cane, rubber, tea, sisal.

Minerals: gold, tin.

Uganda lies immediately south of Anglo-Egyptian Sudan and west of Kenya, along the northwest shore of Lake Victoria. The surface is extremely diversified, with lofty plateaus, snow-capped peaks, swamps, forests and arid areas. A British protectorate over the area was proclaimed in 1894. A large measure of home rule is given the native states, notably Buganda, whose *Kabaka* (king) is assisted by a ministry and native parliament.

Agriculture, including livestock, is the basis of the economy. Cotton is raised, principally by natives, and coffee, tea and rubber are grown on large plantations. Most natives possess large herds of cattle and sheep. In 1948 there were 7,600 Europeans and 37,450 Asiatics in the protectorate.

Like the topography, the climate is extremely variable. At Entebbe, the mean temperature is about 70°, with rainfall heaviest from March through May, and in November and December.

Union of South Africa (Dominion)

Area: 472,550* square miles.

Population (est. 1949): 12,111,800* (1946: European, 20.7%; Bantu, 68.7%; mixed, 8.1%; Asiatic, 2.5%).

Density per square mile: 25.6*

Governor General: Ernest G. Jansen.

Prime Minister: Daniel F. Malan.

Principal cities (census 1946): Johannesburg, 727,743 (gold, industrial center); Capetown, 454,052 (seat of legislature, seaport); Durban, 357,304 (seaport); Pretoria, 236,367 (seat of administration); Port Elizabeth, 146,231 (seaport).

Monetary unit: South African pound (£SA).

Languages: English, Afrikaans.

Religions (European population): Dutch Reformed Churches, 55%; Anglican Church, 19%; Methodist, 6%; Presbyterian, 5%; Roman Catholic, 5%; others 10%.

* Excluding South West Africa.

HISTORY. After the discovery of the Cape of Good Hope in 1488 by Bartholomeu Diaz, the Dutch sent the first colonists to the area in 1652. The British seized the territory in 1814 near the close of the Napoleonic wars, when Holland was France's ally. In protest against the British rule, thousands of Boers, settlers of Dutch descent, trekked northward between 1835 and 1838 and set up the republics of Orange Free State and Transvaal, subsequently recognized by the British.

The discovery of gold in Transvaal in 1886 brought an influx of English and other foreigners. British demands that these immigrants be enfranchised by the Transvaal government precipitated the South African War of 1899-1902, won by the British. By the Treaty of Vereeniging (May 31, 1902) the Boers renounced the independence of Transvaal and Orange Free State. In 1910, Cape Colony, Transvaal, Natal and the Orange Free State were set up as the Union of South Africa, with dominion status and with Louis Botha, a former Boer general, as the first prime minister. During World War I, South African forces seized German South-West Africa, over which the Union later received a mandate by the Treaty of Versailles.

When World War II broke out, there was considerable pro-German and anti-British feeling in South Africa. The country went to war against the Axis, however, under the leadership of Prime Minister Jan C. Smuts, and South African forces fought in many theaters.

In the elections of May, 1948, Smuts' United party was defeated by a Nationalist-Afrikaner coalition, which favored strict racial segregation. Violent race riots broke out between Indians and Zulus in Durban and vicinity during Jan., 1949, with a toll of 142 dead and more than 1,000 injured.

GOVERNMENT The Union of South Af-

rica, as a self-governing dominion, has its own legislature, a Senate of forty-four members elected for ten years, and a House of Assembly of 153 members elected for five years. All legislators must be Union nationals of European descent, and suffrage is virtually limited to whites. The governor general, appointed by the British Crown after consultation with the Union, can summon or dissolve the Senate and House, but a general election must be held at least once every five years.

In parliamentary elections held on May 26, 1948, 71 seats went to the Nationalist party, 65 to the United party, 9 to the Afrikaner party and 6 to the Labour party. The first parliamentary elections in South-West Africa, held Aug. 30, 1950, added 6 new Nationalist seats.

The elected councils in each of the four provinces have only such powers as are delegated to them. Each is headed by an administrator appointed by the central government.

Political considerations made the draft inexpedient in World War II, and all members of the armed forces were volunteers. The postwar strength of the defense forces is fixed as follows: army, 4,640; air force, 3,319; navy, 863; a total strength of 8,822 as opposed to 5,549 in the prewar establishment. The navy, only slightly expanded in World War II, has 60 small vessels.

EDUCATION. Education for white children is compulsory from 7-16. Primary education is free and, except for vocational schools and the five universities, all education is under provincial control.

In 1946 there were 2,851 state and state-aided primary and secondary schools for European scholars, who numbered 413,884, and 6,030 non-European schools with enrollment of 864,410. The average number of university students was 19,994.

The official languages are English and Afrikaans. The latter, derived from 17th-century Dutch, is taught in almost all the schools. About 70 per cent of the population over 7 years old understands both languages. People speaking Afrikaans as a "home" language predominate in all provinces except Natal, where most of the Asiatic population, chiefly laborers from South India, is concentrated. European and Asiatic immigration is strictly controlled.

AGRICULTURE. South Africa is predominantly a pastoral country, with less than 15 per cent of its area considered arable. Sheep and cattle raising are the principal occupations, especially in the high veldt. Wool production in 1949 was estimated at 218,000,000 lbs. In 1948 there were 32,-612,000 sheep, 12,470,000 cattle and 1,105,-583 hogs (1947).

Climate and differences in terrain combine to give a great variety of agricultural

products. The staple crop is maize, grown widely with a production varying from 1½ to 3 million tons annually. In southwest Cape Province, products of the Mediterranean type predominate, while in the coastal belt of Natal and in northern Transvaal, subtropical crops, especially sugar, are grown.

Production of leading crops in recent years has been estimated as follows: maize (1948: 2,016,300 short tons); wheat (1949: 429,000 tons); oats (1947: 135,300 tons); barley (1948: 34,100 tons); and rye (1948: 24,200 tons).

MANUFACTURING AND TRADE. In 1947, there was a total of 11,886 factories with 558,725 workers, and the gross value of industrial output was £491,800,000. Food, beverages and tobacco, and metal products are leading products. As a result of the need for armaments in World War II, the Union's manufacturing is no longer mainly devoted to agricultural processing. A wartime iron and steel industry was established, and cement, chemical, textile and auto assembly plants were expanded. Steel production in 1949 was 699,600 short tons; that of pig iron, 778,800 tons. The major industrial area is southern Transvaal.

Trade statistics (in millions of South African pounds):

	1947*	1948*	1949
Exports†	100.0	135.0	152.6
Re-exports	....	....	16.8
Imports	300.6	352.3	314.2

* Estimated. † Excluding gold.

In 1949 the chief exports (besides gold) were wool (23 per cent) and diamonds (7 per cent). The chief customers were Britain (25 per cent), France (9 per cent), Southern Rhodesia (9 per cent) and the U. S. (7 per cent); the principal suppliers, Britain (42 per cent), the U. S. (26 per cent) and Canada (7 per cent). Principal imports included textiles, farm and industrial machinery, motor vehicles and petroleum products.

COMMUNICATIONS. The well-organized railway system, mostly Union-controlled, totaled 13,505 miles in 1947. Roads suitable for motor traffic amounted to 100,000 miles. Regular air service is available to Europe and to the U. S.

FINANCE. Recent data are as follows (in millions of South African pounds):

	1948-49*	1949-50*	1950-51†
Revenue	143.4	145.7	148.7
Expenditure	135.8	146.5	149.0

* Revised estimate. † Draft estimate.

The net public debt of the Union on Mar. 31, 1950, was £SA717,716,000, of which £SA28,486,000 was external. Notes in circulation on Mar. 31, 1950, totaled £SA67,800,000; the gold reserve was US\$166,000,000 (Mar. 31, 1946: \$939,000,000).

TOPOGRAPHY AND CLIMATE. The Union has a high interior plateau, or veldt, nearly half of which averages 4,000 feet in elevation. There are no important mountain ranges, although the Great Escarpment, separating the veldt from the coastal plain, rises to over 10,000 feet. The principal river is the Orange, rising in Basutoland and flowing westward for 1,300 miles through the Union's center to the Atlantic.

Except for the western semi-arid regions, the climate is generally subtropical, much like that of northern Florida. Rainfall averages about 40 inches a year on the east coast and decreases sharply westward. The mean annual temperature is remarkably uniform; at Johannesburg it is 60.6°, with January the hottest month. Most of the rainfall occurs from October to March. **MINERALS, FORESTS AND FISHERIES.** Extensive mineral resources account for the economic prosperity. The dominion is the world's leading gold producer. Diamond production is now surpassed in importance by coal. Mineral production for 1949 included gold, 11,708,013 oz.; coal, 28,104,585 short tons; manganese ore, 644,831 long tons; chromite (1948) 505,018 short tons; diamonds, 1,382,000 carats; asbestos, 45,700 short tons; silver, 1,171,000 oz. Gypsum, lead, tin, tungsten, platinum and copper also are mined, and uranium deposits have been reported.

Forests cover only a small portion of the Union, and are mostly in the east. The whaling industry, centered at Durban on the east coast, produces considerable amounts of whale oil. The Union has extensive fishery resources along the 1,500 miles of coast line. Annual trawler catch of edible fish is about 95,000,000 pounds.

SOUTH-WEST AFRICA—Status: Mandate.

Administrator: P. I. Hoogenhout.
Capital: Windhoek (population 23,359).
Foreign trade (1949): exports, £SA14,696,359; imports £SA11,573,973. Chief exports: karakul skins, butter, slaughter animals, diamonds.

Agricultural products: hides and skins, butter, corn, wheat.

Minerals: diamonds, vanadium concentrates, tungsten, lead, tin, iron ore and copper.

The mandate, bounded on the north by Angola, and on the east by Bechuanaland and the Union of South Africa, was discovered by the Portuguese explorer Diaz in the late 15th century. It is for the most part a portion of the high plateau of South Africa with a general elevation of from 3,000 to 4,000 feet. It became a German colony in 1884 but was conquered by South African forces in 1915, becoming a Union mandate by the terms of the Treaty of Versailles. The Union of South Africa's application for incorporation of the terri-

tory into the Union was rejected by the United Nations assembly on Dec. 14, 1946, and the Union was invited to prepare a trusteeship agreement instead. By a law passed in April, 1949, however, the territory was brought into much closer association with the Union—including representation in the Union Parliament.

The country in general is better suited to grazing than to the raising of crops because of the light rainfall. The karakul sheep industry is particularly well-developed; in 1949, 2,398,863 skins were exported. The Union accounts for almost all the imports and about 40 per cent of the exports. Most of the natives live on large reserves. The principal port is Walvis Bay.

ZANZIBAR—Status: Protectorate.

Capital: Zanzibar (population 60,000).
Sultan: Seyyid Sir Khalifa bin Harub.
British Resident: Sir Vincent Glenday.
Foreign trade (1948): exports, £2,116,858; imports, £2,699,717. Chief export: cloves.
Agricultural products: cloves, copra, sisal.

The protectorate consists principally of the islands of Zanzibar (640 sq. mi.) and Pemba (380 sq. mi.), just off the East African coast. Before 1890, the sultanate's territory also included a large area on the mainland, now comprising Italian Somaliland, Kenya and Tanganyika Territory. It was proclaimed a British protectorate Nov. 4, 1890. The British resident administers the government, but the sultan still retains considerable authority.

The principal industry is the production of cloves—80 per cent of the world supply.

The climate is excessively hot and moist, with a mean annual temperature of 80.5°. June to September is the coolest season.

WESTERN HEMISPHERE

BAHAMAS—Status: Colony.

Capital: Nassau (population 31,891).
Foreign trade (1948): exports, £551,920; imports, £4,702,151. Chief exports: tomatoes, salt.
Agricultural products: tomatoes, citrus fruit, sisal.

Sea products: sponges, lobsters.

The Bahamas are an archipelago of about 3,000 islands, islets (cays) and rocks, east of Florida and north of Cuba, extending from N.W. to S.E. for about 800 miles. Only about 20 of the islands are inhabited; the most important is New Providence (20 sq. mi.) on which Nassau is located. The islands were reached by Columbus in Oct., 1492, and were a favorite pirate resort in the early 18th century. They have been a Crown colony since 1717. The constitution provides for a nominated Legislative Council and a popularly elected Assembly. The governor is advised by an Executive Council.

About 87 per cent of the population is Negro. The tourist trade is of considerable importance, especially at Nassau, which is a favorite winter resort. The climate is exceptionally agreeable, with mean temperatures ranging from 60° (January to March) to 88° (June to September). The rainy season is May through October; hurricanes occur usually from July to October.

Agriculture, except for tomato and sisal culture, is of little importance. Straw and shellwork are the principal industries. An R.A.F. unit is stationed in the archipelago.

BARBADOS—Status: Colony.

Capital: Bridgetown (population 13,345).
Governor: A. W. L. Savage.
Foreign trade (1949): exports, BWI\$22,-504,975; imports, \$33,948,619. Chief exports: sugar (69%), molasses, rum.
Agricultural products: sugar (1949: 135,-859 long tons), cotton.

Barbados, an island east of the Windward group in the West Indies, has been a British possession since 1627; it is believed to have been first visited by the Portuguese. The colony has a nominated Legislative Council and a popularly elected Assembly of 24 members, but the Crown, represented by the governor, retains veto power.

The island is very densely populated (about 1,180 per sq. mi.). About 70 per cent of the inhabitants are Negro, 7 per cent white and the remainder of mixed blood. Approximately 70 per cent of the total area is cultivated and half of this is devoted to sugar, which is the staple product; there are 100 sugar and molasses plants and 3 rum distilleries.

Barbados has an agreeable climate, with temperatures that range between 70° and 86°, rarely below 65°. The cold season (December through May) is also the dry season; average annual rainfall is 60 inches, with September the wettest month.

BERMUDAS—Status: Colony.

Capital: Hamilton (population 3,500).
Governor: Lt. Gen. Sir Alexander Hood.
Foreign trade (1949): exports (including re-exports), £943,211; imports, £7,182,178. Chief export: lily bulbs.
Agricultural products: lily bulbs, potatoes, vegetables, arrowroot.

The Bermudas comprise an archipelago of about 360 small islands, 580 miles east of North Carolina. The largest is (Great) Bermuda or Main Island. Discovered by Juan Bermudez, a shipwrecked Spaniard, early in the 16th century, the islands were settled in 1612 by an offshoot of the Virginia Company and became a Crown colony in 1684. The governor is assisted by nominated Executive and Legislative Councils and a popularly elected Assembly of 36 members. In 1940, sites on the islands were leased for 99 years to the U. S. for air and navy bases. Bermuda is also the head-

quarters of the West Indies and Atlantic squadron of the Royal Navy. The most important factor in the colony's economy is the tourist trade. The mean annual temperature is 71°, with extremes of 49° and 94°. Rainfall averages 58 inches annually.

BRITISH GUIANA—Status: Colony.

Capital: Georgetown (population 97,821).

Governor: Sir Charles Woolley.

Foreign trade (1949): exports, BG\$45,867,063; imports, BG\$50,927,886; re-exports, BG\$215,166. Chief exports: sugar (45%), bauxite, rum, rice.

Agricultural products: sugar (1949: 174,236 long tons), rice, copra, coffee.

Minerals: bauxite (1949: 1,757,650 long tons), gold (21,098 oz.), diamonds (34,790 carats).

Forest products: balata, timber.

The only British possession in South America proper, British Guiana is on the northeastern coast between Venezuela and Surinam (Dutch Guiana). Settled by the Dutch in the 17th century, it was occupied by the British in 1796 and ceded to them at the end of the Napoleonic wars. Behind the low plain which contains the farm area is a higher area containing forest and mineral resources. The governor is assisted by an Executive Council; the Legislative Council has an elected majority.

The heterogeneous population includes Africans and mixed races, 49.5 per cent; East Indians, 44 per cent; aborigines, 2.5 per cent; Portuguese, 2.2 per cent; Chinese, 1 per cent; and others, .8 per cent.

Cultivated areas cover only 155,000 acres, mostly devoted to rice and sugar cane. About 86 per cent of the colony is forested, but the vast forest resources are relatively unexploited. Timber resources have been estimated at 41,000,000,000 cu. ft. of merchantable timber. Railway mileage is 110, and highway mileage about 700; communication to the interior is mainly by steamer and launch. The colony's production of bauxite was of strategic importance during World War II.

The coastland climate is relatively hot and humid, with average temperatures of 78° in January and 81° in October, and only a slight variation between day and night. Inland temperatures are roughly 3° higher. Rainfall is heavy along the coast.

BRITISH HONDURAS—Status: Colony.

Capital: Belize (population 21,837).

Governor: Sir Ronald H. Garvey.

Foreign trade (1949): exports (including re-exports), BH\$4,564,847; imports, BH\$5,990,264. Chief exports: chicle, mahogany.

Agricultural products: bananas, sugar cane, citrus fruits.

Forest products (1949): cedar lumber (39,341 cu. ft.) and logs (11,644 cu. ft.); mahogany lumber (332,107 cu. ft.) and logs (123,455 cu. ft.); pine lumber (645,755 cu. ft.); chicle (346 short tons).

British Honduras is bounded on the north by Mexico and on the west and south by Guatemala. It was settled in 1662 by woodcutters from Jamaica. An irregular form of local government continued until 1871, when it became a Crown colony; it was separated from Jamaica in 1884. The governor is assisted by an Executive Council and a partly elected Legislative Council.

The colony's economy is dependent upon timber and other forest exports. Agriculture has never been adequately developed. There are no railways, and road development is backward (about 135 mi. surfaced). Most of the population are mestizos of Negro, native Indian and white descent.

The climate is subtropical, with maximum recorded temperature of 98°, and minimum of 50°. Rain falls mostly from May to February, and almost continuously from October through December.

Canada (Dominion)

Area (land only): 3,619,616 square miles. Population (est. June 1, 1950): 13,845,000 (1941*: British, 50%; French, 27%; German, 4%; Ukrainian, 2%; others, 17%).

Density per square mile: 3.8.

Governor General: Field Marshal Viscount Alexander of Tunis.

Prime Minister: Louis Stephen St. Laurent.

Principal cities (census 1941): Montreal, 903,007 (est. 1949: 1,420,057) (seaport); Toronto, 667,457 (est. 1949: 673,104) (manufacturing center); Vancouver, 275,353 (Pacific seaport); Winnipeg, 221,960 (grain); Hamilton, 166,337 (iron and steel); Ottawa, 154,951 (capital); Quebec, 150,757 (seaport); Windsor, 105,311 (automobiles).

Monetary unit: Canadian dollar.

Religions (census 1941)*: Roman Catholic, 42%; United Church, 19%; Anglican, 15%; Presbyterian, 8%; Baptist, 4%; others, 12%.

* Excluding Newfoundland.

With the second largest continuous land area in the world, stretching across the northern part of the North American continent, the Dominion of Canada is one of the world's leading sources of wheat, minerals, and paper and pulp. Unsurpassed in its record of loyalty to the Empire in both World Wars, the Dominion has continued its wartime policy of close military and political co-operation with the U. S.

HISTORY. The Norse explorer Leif Ericsson probably reached the shores of Canada (Labrador or Nova Scotia) in A.D. 1000, but the history of the white man in the country actually began in 1497, when John Cabot, an Italian in the service of Henry VII of England, reached the shore of Newfoundland or Nova Scotia. Canada was taken for France in 1534 by Jacques Cartier. The actual settlement of New France,

Canadian Governors General and Prime Ministers Since 1867

Term of office	Governor General	Term	Prime Minister	Party
1867-1869	Viscount Monck	1867-1873	Sir John A. Macdonald	Conservative
1869-1872	Baron Lisgar	1873-1878	Alexander Mackenzie	Liberal
1872-1878	Earl of Dufferin	1878-1891	Sir John A. Macdonald	Conservative
1878-1883	Marquess of Lorne	1891-1892	Sir John J. Abbot	Conservative
1883-1888	Marquess of Lansdowne	1892-1894	Sir John S. D. Thompson	Conservative
1888-1893	Baron Stanley	1894-1896	Sir Mackenzie Bowell	Conservative
1893-1898	Earl of Aberdeen	1896(2 mos)	Sir Charles Tupper	Conservative
1898-1904	Earl of Minto	1896-1911	Sir Wilfrid Laurier	Liberal
1904-1911	Earl Grey	1911-1917	Sir Robert L. Borden	Conservative
1911-1916	Duke of Connaught	1917-1920	Sir Robert L. Borden	Unionist
1916-1921	Duke of Devonshire	1920-1921	Arthur Meighen	Unionist-National, Conservative
1921-1926	Viscount Byng			
1926-1931	Viscount Willingdon	1921-1926	W. L. Mackenzie King	Liberal
1931-1935	Earl of Bessborough	1926(3 mos)	Arthur Meighen	Conservative
1935-1940	Baron Tweedsmuir	1926-1930	W. L. Mackenzie King	Liberal
1940-1946	Earl of Athlone	1930-1935	Richard B. Bennett	Conservative
1946-	Field Marshal Viscount Alexander of Tunis	1935-1948	W. L. Mackenzie King	Liberal
		1948-	Louis Stephen St. Laurent	Liberal

as it was then called, began in 1604 at Port Royal in what is now Nova Scotia; in 1608 Quebec was founded. France's colonization efforts were not very successful, but French explorers by the end of the 17th century had penetrated beyond the Great Lakes to the western prairies and south along the Mississippi to the Gulf of Mexico. Meanwhile, the English Hudson's Bay Company had been established in 1670. Because of the valuable fisheries and fur trade, a conflict developed between the French and English; in 1713, Newfoundland, Hudson Bay and Nova Scotia (Acadia) were lost to England.

During the Seven Years' War (1756-63), England extended its conquest, and the British general, Wolfe, won his famous victory over Montcalm outside Quebec (Sept. 13, 1759). The Treaty of Paris (1763), put Canada under English control.

At this time the population of Canada was almost entirely French, but in the next few decades thousands of British colonists emigrated to Canada from the British Isles and from the American colonies. Partly to placate the French who were concentrated in Quebec, Canada was divided into Upper (British) and Lower (French) Canada in 1791. In 1840 the two provinces again were joined under one government, and in 1849 the right of Canada to self-government was recognized. By the British North Amer-

ica Act of 1867, the Dominion of Canada was created through the confederation of Upper and Lower Canada, Nova Scotia and New Brunswick. Prince Edward Island joined the Dominion in 1873. In 1869 Canada had purchased from the Hudson's Bay Company the vast middle west (Rupert's Land) from which the provinces of Manitoba (1870), Alberta and Saskatchewan (1905) were later formed. In 1871 British Columbia joined the Dominion. The country was linked from coast to coast in 1885 by completion of the Canadian Pacific Railway.

During the formative years between 1867 and 1896, the Conservative Party led by Sir John A. Macdonald governed the country, except during the years 1873-78. In 1896 the Liberal Party took over and under Sir Wilfrid Laurier, an eminent French Canadian, ruled until 1911. In World War I, more than 500,000 Canadian soldiers fought for the Allied cause. After the Treaty of Versailles, Canada, a full-fledged nation, was admitted to the League of Nations and appointed its own representatives in foreign countries. By the Statute of Westminster (1931) the British Dominions, including Canada, were formally declared to be partner nations with Britain, "equal in status, in no way subordinate to each other," and bound together only by allegiance to a common Crown. The Liberal

Party under W. L. Mackenzie King won the elections in 1935 and was returned to power in 1940 and 1945 (he had previously served as prime minister from 1921 to 1930, except for three months in 1926). On Nov. 15, 1948, King resigned and was succeeded by Louis Stephen St. Laurent, who was returned as prime minister in the national elections of June 27, 1949.

Newfoundland became Canada's tenth province on March 31, 1949, following a plebiscite held July 22, 1948, in which the people voted by a narrow margin to unite with Canada.

PROVINCES AND TERRITORIES

Provinces	Land area (sq. mi.)	Population (est. June 1950)
Alberta	248,800	895,000
British Columbia	359,279	1,138,000
Manitoba	219,723	795,000
New Brunswick	27,473	522,000
Newfoundland	152,734	355,000
Nova Scotia	20,743	658,000
Ontario	363,282	4,512,000
Prince Edward Island	2,184	96,000
Quebec	523,860	3,976,000
Saskatchewan	237,975	874,000
Territories		
Northwest Territories	1,258,217	16,000
Yukon	205,346	8,000

Provinces	Capital	Prime Minister, 1950
Alberta	Edmonton	Ernest C. Manning ¹
British Columbia	Victoria	Byron I. Johnson ²
Manitoba	Winnipeg	D. L. Campbell ³
New Brunswick	Fredericton	John B. McNair ²
Newfoundland	St. John's	Joseph Smallwood ²
Nova Scotia	Halifax	Angus L. Macdonald ²
Ontario	Toronto	Leslie Frost ²
Prince Edward Island	Charlottetown	Walter Jones ²
Quebec	Quebec	Maurice Duplessis ⁴
Saskatchewan	Regina	T. C. Douglas ⁵
Territories		
Northwest Territories	Ottawa	H. L. Keenleyside [*]
Yukon	Dawson	J. E. Gibben [†]

¹ Social Credit; ² Liberal; ³ Progressive; ⁴ Union Nationale; ⁵ Co-operative Commonwealth Federation.

^{*} Commissioner. [†] Acting Controller.

GOVERNMENT. Canada, a self-governing dominion of the British Commonwealth of Nations, is a federal union of 10 provinces whose powers are laid down in the British North America Act of 1867. The executive powers nominally rest in the hands of the Governor General, who represents the King

and is appointed by the British Government with the approval of the Canadian Government.

Actually, the Governor General acts only with the advice of the Canadian Prime Minister and the members of the Cabinet, who at the same time sit in the Dominion Parliament. The Parliament has two houses: a Senate numbering 102 members appointed for life, and a House of Commons numbering 262 members apportioned according to provincial population. Elections are held at least every five years or whenever the party in power is voted down in the House of Commons or considers it expedient to appeal to the people. The Prime Minister is the leader of the majority party in the House of Commons. Laws must be passed by both houses of Parliament and signed by the Governor General in the King's name. The results of Parliamentary elections on June 27, 1949, were as follows: Liberals, 193; Progressive Conservatives, 42; Co-operative Commonwealth Federation, 12; Social Credit, 10; independents, 5.

The members of the Cabinet include Louis S. St. Laurent (Prime Minister), W. McL. Robertson (Minister without Portfolio), J. A. MacKinnon (Minister without Portfolio), L. B. Pearson (External Affairs), Alphonse Fournier (Public Works), Lionel Chevrier (Transport), Milton Gregg (Labour), Stuart Garson (Justice), R. W. Mayhew (Fisheries), C. D. Howe (Trade and Commerce), J. G. Gardiner (Agriculture), James J. McCann (National Revenue, Mines and Technical Surveys), Paul J. Martin (Health and Welfare), Edouard Rinfret (Postmaster General), Douglas C. Abbott (Finance), Brooke Claxton (Defense), Hugues Lapointe (Solicitor General, Veterans Affairs), Robert H. Winters (Reconstruction, Resources and Development), Walter Harris (Citizenship and Immigration) and Gordon Bradley (Newfoundland).

The ten provincial governments are nominally headed by Lieutenant Governors appointed by the Dominion Government, but the executive power in each actually is vested in a cabinet headed by a prime minister, who is leader of the majority party. In nine of the ten provinces the legislature is composed of a one-house assembly elected by the people for 4 years.

In Quebec there is also a second chamber, called the Legislative Council, composed of nominees of the Provincial Government.

JUDICIAL SYSTEM. The judicial system consists of a supreme court in Ottawa (established in 1875), with appellate jurisdiction, and a supreme court in each province as well as county courts with limited jurisdiction in most of the provinces. The Governor General in Council appoints the judges of these courts.

DEFENSE. Canadian armed forces, consisting of the Army, Royal Canadian Air Force and the Royal Canadian Navy, are under the Ministry of National Defense. Conscription was in effect during World War II, but most of the nearly 300,000 men who saw overseas service were volunteers. Canadian casualties were 104,125, including 41,371 dead.

In 1949, personnel on active service included 17,187 in the army, 13,600 in the air force and 8,000 in the navy. The navy had in active service on Jan. 1, 1950, one aircraft carrier, 2 cruisers, 11 fleet destroyers, 15 escort destroyers and frigates, and numerous ancillary craft.

The Royal Canadian Mounted Police is the constabulary maintained by the Dominion Government. In 1949 it had a strength of about 3,900 men. Its duties include the enforcement of smuggling laws, suppression of traffic in drugs, protection of government buildings and dockyards, and counter-subversive work. It is the sole police force operating in the Northwest Territories and Yukon.

EDUCATION. Control of education was specifically delegated to the provinces by the British North America Act of 1867. Elementary schools in all provinces except Quebec are free, as is secondary education in most provinces. The supreme education authority in Quebec is a council of public instruction with two aides supervising the Roman Catholic and Protestant schools respectively. Fees paid by parents having children of school age help defray the cost of education. In the rest of the provinces the system is non-denominational, and education for the most part is compulsory for all children between the ages of 8 and 14. Of Canada's 18 universities, 6 are state-controlled and 12 are independent of provincial control. Leading universities are Toronto, which belongs to the first group, and McGill (Montreal), the second group.

VITAL STATISTICS. In 1949 the birth rate was 26.6 per 1,000 population and the death rate 9.1 per 1,000.

The immigration movement reached its peak in 1913, when 402,432 immigrants were enumerated. Immigration fell off sharply during World War I but rose in the postwar years to a peak of 167,723 in 1929. Immigration for 1948 totaled 125,414, of whom 42,595 came from the British Isles; in 1949 this fell to about 100,000, including 20,000 from Britain.

AGRICULTURE. Agriculture, including horticulture, fruit-growing and the raising of stock and poultry, is the largest single industry. Of the total land area, 549,660 square miles, or 15.2 per cent, consists of agricultural land. Canadian farming is based almost entirely on relatively small individual holdings. Canada is one of the

world's greatest wheat-exporting countries; production is concentrated in Manitoba, Saskatchewan and Alberta. Canada is also a leading producer of other cereals, the most important in point of value being oats and barley.

CROP ACREAGE AND PRODUCTION

	(in thousands)		Short tons	
	Acres		1948	1949*
Wheat	23,880	27,539	11,591	11,022
Oats	11,201	11,349	6,100	5,381
Barley	6,496	6,017	3,720	2,889
Rye	2,004	1,081	709	283
Corn	252	271	347	382

* Provisional.

Apple growing, carried on in Nova Scotia, southern Quebec and central Ontario, is the chief horticultural activity; other fruit growing regions are the Niagara and Lake Erie districts and southern British Columbia. Sugar beet cultivation is assuming increasing importance, and tobacco is produced in southern Ontario. The production of honey and maple sugar is also important. The estimated value of field crops in 1948 was \$1,600,874,000; in the first half of 1949, \$1,056,500,000.

Stock raising and dairy farming have grown greatly since 1920. Ontario and Quebec are the most important dairying provinces. In Oct., 1948, Canada had 8,251,000 cattle, 4,604,000 hogs and 1,322,000 sheep. Dairy production in 1949 included butter, 126,800 metric tons; milk, 1,950,000,000 gals.; and cheese, 51,600 metric tons. Wool production in 1949 was approximately 5,000 metric tons, greasy basis.

INDUSTRY. Canadian manufactures rely mainly on domestic raw materials; growing industries which depend largely on materials imported in a raw or semi-finished state include the manufacture of automobiles, sugar and rubber goods as well as the iron and steel industry in Nova Scotia, Quebec and Ontario. The latter two provinces account for more than 80 per cent of all manufactures. The abundance of cheap water power is one of the chief factors in the growth of Canadian industry. Production of steel ingots and castings in 1949 was 3,186,930 tons; pig iron, 2,154,352 tons; ferroalloys, 211,603 tons. In 1948 the gross value of manufactured products was Can.\$11,800,887,000; there were 32,734 plants employing 1,332,000 persons in 1947. The most important industries by value of output were pulp and paper, meatpacking, nonferrous-metals smelting and refining, sawmills and electrical apparatus.

TRADE. Canada is one of the great trading nations of the world. The bulk of its foreign commerce is in raw or semi-finished products.

Trade statistics (in millions of Canadian dollars):

Year	Imports	Exports	Re-exports
1939	751.1	924.9	11.0
1940	1,082.0	1,178.9	14.3
1941	1,448.8	1,621.0	19.5
1942	1,644.2	2,363.8	21.7
1943	1,735.1	2,971.5	29.8
1944	1,758.9	3,440.0	43.1
1945	1,585.8	3,218.3	49.1
1946	1,927.3	2,312.2	27.0
1947	2,573.9	2,774.9	36.9
1948	2,636.9	3,075.4	34.6
1949	2,761.2	2,993.0	29.5
1950*	1,170.6	1,141.4	14.9

* First five months.

In 1949, Canada's principal customers were the U. S., 50 per cent; Britain, 24 per cent; Union of South Africa, 2.6 per cent; India, 2.4 per cent; and Belgium, 1.9 per cent. Leading suppliers were the U. S., 71 per cent; Britain, 11 per cent; Venezuela, 3.3 per cent; Australia, 1.0 per cent; and India, 0.9 per cent. The leading exports were wheat, 14.5 per cent; newsprint, 14.4 per cent; wood pulp, 5.7 per cent; planks and boards, 5.3 per cent; and flour, 3.3 per cent. Leading imports were crude petroleum, 6.8 per cent, and farm implements and machinery, 6.4 per cent.

COMMUNICATIONS. Because Canada's exports are to a large extent bulky raw materials, cheap water transportation is essential. The country's system of canals, especially those connecting the Great Lakes, forms an integral part of the inland communications system. Canal traffic amounted to 24,373,752 tons in 1949; 13,692,209 tons of freight were carried on the Welland Canal alone.

Railway facilities have been improved in relation to the export of wheat from the prairie provinces and to the development of the mineral and wood pulp industries in northern Quebec and northern Ontario. About 90 per cent of the Canadian railway mileage of 42,322 miles is under the control of two systems, the government-owned Canadian National and the privately-owned Canadian Pacific. Canada's principal merchant marine lines are the Canadian Pacific, which operates a subsidiary ocean steamship company, and the Canadian National, which has minor steamship lines under its control. The merchant marine on Dec. 31, 1949, numbered 1,318 steam and motor vessels (of over 100 tons) with a tonnage of 2,004,578.

In 1946-47 Canada had 140,000 miles of improved highways. On April 3, 1946, Canada formally took over 1,500 miles of the Alaska highway. Motor vehicles licensed in 1948 numbered 2,034,943.

The Trans-Canada Air Lines, established in 1937, is controlled by the Dominion Government. In 1949, Canadian airlines carried 1,222,099 revenue passengers and

flew 392,507,141 revenue passenger-miles. In 1949, Canada had 2,458,000 telephones and 2,103,277 licensed private radio sets.

FINANCE. Recent data are as follows (in millions of Canadian dollars):

	1948-49	1949-50	1950-51*
Revenue	2,768.2	2,549.0	2,430.0
Expenditure	2,193.2	2,438.0	2,410.0

* Budget estimate.

The gross funded debt on March 31, 1949, was reported at \$15,585,036,371, compared to \$15,957,381,000 on March 31, 1948, and \$6,013,000,000 on March 31, 1940. Currency in circulation in Mar., 1950, totaled \$1,181,000,000.

TOPOGRAPHY. Covering the northern part of the North American continent and with an area larger than that of the United States, Canada's topography is extremely diversified. The northeastern region, including most of Quebec, northern Ontario and Manitoba, and the Northwest Territories, with Hudson Bay in the center, is an important source of minerals, wood pulp and water power. In the east the mountainous maritime provinces have an irregular coast line on the Gulf of St. Lawrence and the Atlantic. The St. Lawrence plain, covering most of southern Quebec and Ontario, and the interior continental plain, covering southern Manitoba and Saskatchewan and most of Alberta, are the principal cultivable areas. They are separated by a forested plateau rising from Lakes Superior and Huron. Westward toward the Pacific, most of British Columbia, Yukon, and part of western Alberta are covered by parallel mountain ranges including the Rockies. The Pacific border of the coast range is ragged with fjords and channels. The highest point in Canada is Mt. Logan, 19,850 ft., located in the Yukon.

CLIMATE. Canada has great variations of climate. South of the Gulf of St. Lawrence, the maritime provinces have an average temperature of 40° for the year and over 60° for the summer months. In Quebec and northern Ontario the winters are cold and the summers average from 60° to 65°. In southern Ontario the average summer temperature is 65°, with an occasional rise to 90°. The prairie provinces have a distinctly continental climate with comparatively short warm summers and long cold winters. The west coast has a climate similar to that of the southern coast of England. Northwest and northeast of Hudson Bay the climate is too severe for trees.

HYDROGRAPHY. Canada has an abundance of large and small lakes. In addition to the Great Lakes on the United States border, there are nine others which are more than 100 miles long and 35 which are more than 50 miles long.

The two principal river systems are the Mackenzie and the St. Lawrence. The St. Lawrence with its tributaries is navigable for over 1,900 miles and is the commercial artery of eastern Canada. The northern parts of Alberta and much of northern British Columbia are drained through the Athabaska and Peace Rivers, first north-eastward toward Lake Athabaska and then north through Slave River to Great Slave Lake and finally northwest through the Mackenzie River to the Arctic Ocean. If measured to the head of Finlay River, the Mackenzie has a length of more than 2,500 miles and is navigable for 1,292 miles.

As most of the Canadian rivers have waterfalls on their courses they are of considerable importance as sources of power. Average monthly production of electricity in 1949 was 3,889,000,000 kwh.

MINERALS. Canada's mineral resources are both rich and varied. Mining production in 1949 was valued at \$890,200,000. Metals come mainly from two widely separated regions, the mountain ranges of the Pacific coast and the province of Ontario. Copper ore also exists in Quebec, Manitoba and Newfoundland. Production of petroleum (21,487,130 barrels in 1949) centers in Alberta. There are important deposits of uranium in the Northwest Territories.

MAJOR MINERALS

Mineral	1948	1949*
Asbestos (tons)	716,769	573,668
Coal (tons)	18,449,689	19,109,747
Copper (lb.)	481,463,966	525,983,025
Gold (oz.)	3,529,608	4,112,626
Lead (lb.)	334,501,917	320,984,062
Nickel (lb.)	263,479,163	262,168,484
Silver (oz.)	16,109,982	17,377,194
Zinc (lb.)	468,327,036	581,382,544

* Provisional.

FORESTS, WILD LIFE AND FISHERIES.

The total area of land covered by forests is estimated at 1,290,960 square miles, of which 435,000 are productive and accessible. Production of sawn lumber was estimated at 5,289,237,000 bd. ft. in 1949. The manufacture of pulp and paper is one of the leading industries. Newsprint production in 1949 (not including Newfoundland) was 4,732,131 tons; exports were 4,704,652 tons, of which 4,186,153 tons went to the U. S.

Fishing, Canada's oldest industry, is carried on along the Atlantic and Pacific coasts and on the inland lakes. The most important fish are salmon, cod, herring, mackerel, lobsters, sardines, halibut, haddock, whitefish and trout. The total value of fishery production in 1948 was \$138,-258,313; the catch totaled 13,478,413 cwt.

Fur farming and trapping is also important. Trapping is carried on principally in the North while Quebec, Ontario and Alberta lead in the number of fur farms.

The more important animals raised on fur farms are fox, muskrat, beaver, mink, raccoon and martin. For the year ending June 30, 1948, 7,952,146 pelts valued at \$32,233,000 were taken. Annual fur auctions are held at Montreal, Winnipeg, Vancouver, Edmonton and Regina.

FALKLAND ISLANDS AND DEPENDENCIES

Governor: Sir Miles Clifford.

Capital: Port Stanley (population 1,246).

Foreign trade (1949): exports, £4,011,966; imports, £1,998,409. Chief export: whale oil.

This sparsely inhabited Crown colony consists of a group of islands in the south Atlantic about 250 miles east of the South American mainland. Dependencies include all islands and Antarctic territory between 20° and 50° w. long., south of 50° s. lat., and between 50° and 80° w. long., south of 58° s. lat. The chief industry is sheep raising, and apart from the production of wool, hides and skins and tallow, there are no known resources. The whaling industry is carried on successfully from South Georgia Island; 169,203 barrels of whale oil were exported in 1949.

The islands were discovered by John Davis in 1592. East Falkland Island was claimed for France in 1764, and West Falkland Island for Britain the following year. The French settlement later passed to Spain, and in 1829 was colonized by Argentina. The Argentines were ejected by the British in 1833 and have since reasserted their claim to the islands many times, most recently in Feb., 1948. In 1914 the Battle of Falkland Islands was fought nearby, resulting in a British victory. During World War II, Stanley Harbour was an important naval base.

The climate is equable though relatively cold, with temperatures averaging about 47° in midsummer and 37° in midwinter.

JAMAICA AND DEPENDENCIES—Status: Colony.

Capital: Kingston (population 201,911).

Governor: Sir John Huggins.

Foreign trade (1949)*: exports, £12,137,-461; imports, £19,225,539. Chief exports: sugar (40%), bananas (19%), rum (11%).

Agricultural production (1949): sugar (238,000 long tons), bananas (7,105,195 stems), citrus fruits, ginger, coffee, pimento.

* Excluding dependencies.

Jamaica, the largest island in the British West Indies (4,470 sq. mi.), is eighty miles south of the eastern end of Cuba. Its island dependencies include the Turks and Caicos Islands (about 600 mi. N.E.), Cayman Islands (about 300 mi. N.W.) and two uninhabited cays. It was discovered by Columbus in 1494 and remained in Spanish possession until 1655, when it was taken by the British. According to the constitution of Nov. 20, 1944, the Governor is assisted

by a House of Representatives of 32 popularly elected members; a Legislative Council (upper house) of 15 members and an Executive Council of 10 members, 5 of whom are elected by the House of Representatives.

Jamaican sites were leased for 99 years to the U. S. in 1940 for naval and air bases.

The colony's economy depends on agriculture, and about 200,000 acres are under cultivation. Sugar took the place of bananas as the chief crop during World War II. Jamaica is virtually the sole source of pimento. Manufacture of consumer's goods has increased considerably in recent years.

Rail mileage totals 299, and highways 4,594. Jamaica's favorable climate makes it attractive to tourists. Temperatures at Kingston range from about 71° to 88°, but are considerably cooler inland. The rainy seasons are in May and October.

LEEWARD ISLANDS—Status: Colony.

Capital: St. John's (population 10,000). Governor: Kenneth W. Blackburne.

Foreign trade (1947): exports, £1,440,030; imports, £2,180,821. Chief export: sugar.

Agricultural products: sugar, cotton, coconuts, citrus fruits, tobacco.

The Leeward Islands constitute a federated group southeast of Puerto Rico; they are divided into four presidencies—Antigua (108 sq. mi.) and dependencies (63 sq. mi.); Virgin Islands (67 sq. mi.); St. Kitts (68 sq. mi.) and Nevis (50 sq. mi.) and dependency (34 sq. mi.); and Montserrat (33 sq. mi.). The whole federation has a nominated Executive Council and a partially elected Legislative Council. Each presidency also has a local administration. In 1940, the U. S. acquired a 99-year lease on sites for a naval and air base on Antigua. The islands are predominantly agricultural.

Temperatures average about 76° in January and 81° in August; rainfall is moderate throughout the year.

TRINIDAD AND TOBAGO—Status: Colony.

Capital: Port of Spain (population 102,878).

Governor: Maj. Gen. Sir Hubert Rance.

Foreign trade (1949): exports, BWI\$131,789,585; re-exports, \$6,606,901; imports, \$154,214,803. Chief exports: petroleum, sugar.

Agricultural products: sugar (1949: 158,890 long tons), cacao, coconuts.

Minerals (1949): petroleum (20,616,721 barrels), asphalt (145,160 long tons).

The islands of Trinidad and Tobago are 16 and 21 miles, respectively, off Venezuela just north of the Orinoco delta. Both were discovered by Columbus in 1498, and remained Spanish possessions until 1797, when the British took them. They are administered by a governor. In 1941 the

United States was granted 99-year leases on the islands for naval and air bases covering a total of 25,000 acres.

The soil is rich for the growing of tropical products; sugar and cacao are the principal crops. Trinidad is the leading oil producer of the British Commonwealth, and the world's most notable source of asphalt, found in Pitch Lake, thirty-eight miles southeast of Port of Spain. Port of Spain is the chief port, and a transshipment point for Orinoco trade. About a third of the population is East Indian.

Trinidad's climate is tropical, with a mean annual temperature of 80°. The rainy season is from May to January (except October).

WINDWARD ISLANDS—Status: Colony.

Capital: St. George's (population 5,755).

Governor: Sir Robert D. H. Arundell.

Foreign trade (1947): exports, £1,841,703; imports, £2,899,478.

Agricultural products: arrowroot (St. Vincent), nutmeg (Grenada), mace (Grenada), cacao.

These islands, four in number, form the southern portion of the Lesser Antilles in the Caribbean; they extend approximately 250 miles from the French colony of Guadeloupe on the north to the British colony of Trinidad on the south. Their total area of about 820 square miles divides as follows: Dominica, 304; St. Lucia, 233; St. Vincent, 150; Grenada, 133. The four units are not federated and have no common legislature or laws, although they do have a common governor.

More than two-thirds of the inhabitants are Negroes, nearly one-third mulatto, and about 2 per cent white. Agriculture is the only industry. St. Vincent has a virtual monopoly on the world supply of arrowroot, and Grenada furnishes about 40 per cent of the world's nutmeg.

All the islands are of volcanic origin. The climate is pleasant, although rainfall is heavy, particularly in summer. The temperature in January averages 77°, in September, 80°.

ASIA

ADEN—Status: Colony and Protectorate.

Governor: Sir Reginald S. Champion.

Foreign trade (1949): exports, Rs. 194,795,051; imports, Rs. 436,711,407.

The British colony and protectorate of Aden is situated on the volcanic southern tip of the Arabian peninsula, along the Gulf of Aden. The colony (port) of Aden was annexed to Britain in 1839 and was part of the Bombay Presidency until 1932, when it became a separate province with the chief commissioner responsible to the Indian government. In 1937 it was transferred from Indian to Imperial control as

a Crown colony. It is administered by a governor and commander in chief aided by an Executive Council. The 20-odd sultans who rule their respective territories in the protectorate are responsible to him.

The island of Perim (5 sq. mi.), the Kuria Muria islands, and the island of Kamaran (22 sq. mi.) are attached administratively to Aden.

Aden colony is essentially a transshipment point and bunkering station and the commercial center for the Yemen and the African coast opposite. Aden airport is a station on the Khartoum-Karachi air route. Agriculture is unimportant except for some coffee and tobacco, and manufactures are limited to salt, cigarettes and native dhows.

BAHREIN ISLANDS—Status: Protectorate and Sheikdom.

British Political Agent: C. J. Pelly.

These islands form an archipelago off Arabia's east coast and are nominally an independent sheikdom, ruled by Sheik Sir Salman bin Hamad al Khalifah, but are actually a protectorate of Great Britain, which is represented by a political agent. They are the center of the Persian Gulf pearl fisheries and the site of an airport on the London-Australia route. The concession for exploitation of petroleum deposits, discovered in 1932, is held by an affiliate of U. S.-owned interests. Output in 1949 was 10,985,484 barrels. Agriculture is of some importance. Most of the trade of the Saudi Arabian provinces of Nejd and Hasa pass through Bahrein. Chief exports are rice, cotton goods, pearls, coffee and tea. The capital and principal port is Manama (pop. 30,000) on Bahrein, the principal island.

BORNEO

COLONY OF NORTH BORNEO—Status: Colony.

Capital: Jesselton (population 26,158).

Governor: Sir Ralph Hone.

Foreign trade (1949)*: exports, Str.\$37,717,000; imports, Str.\$33,971,000. Chief export: rubber (40%).

Agricultural products: rubber (1949: 19,528 long tons), rice, corn.

Forest products: timber, cutch, rattans.

* Excluding transit trade.

The Colony of North Borneo, constituting the extreme northern portion of the island of Borneo, consists largely of highlands and occasional open valleys and plateaus. The territory was a British protectorate administered under a royal charter by the British North Borneo Company from 1881 until July 15, 1946, when it assumed the status of a Crown colony. It was occupied by Japanese troops from 1942 until 1945. Labuan (pop. 9,000; area, 30 sq. mi.), a small island off the North Borneo coast, was transferred from the jurisdiction of

the Straits Settlements to that of North Borneo in 1946.

The population is comprised largely of aboriginal tribesmen living on a very primitive level of culture and social organization. Mineral resources are believed to be considerable, but the colony's income is based on agricultural and jungle produce.

The climate of North Borneo is tropical, with a mean annual temperature range of only 3°, although extremes of 64° and 91° have been recorded. The total rainfall varies between 60 and 180 inches annually and is heaviest in the last three months.

BRUNEI—Status: Protectorate.

Capital: Brunei (population 16,000).

British Resident: E. E. F. Pretty.

Foreign trade (1949): exports, Str.\$62,062,791; imports, Str.\$35,835,170. Chief export: petroleum (95%).

Agricultural products: rice, rubber.

Brunei lies on the northwestern coast of Borneo, entirely surrounded by Sarawak. It was placed under British protection in 1888, and in 1906 a treaty was concluded whereby the native sultan yielded administration of the state to a British resident. The governor of Sarawak was appointed high commissioner for Brunei in 1948. Japanese troops occupied Brunei from 1942 until 1945.

Most of the inhabitants are Malays. The bulk of the population lives in and around the capital, situated on the Brunei River 9 miles from its mouth. The interior is largely forested and contains rich timber. All petroleum is exported to Sarawak for refining (exports 1949: 3,200,440 long tons).

Brunei's climate is comparable to that of North Borneo, except that the wet season is longer, often lasting until March.

SARAWAK—Status: Colony.

Capital: Kuching (population 37,949).

Governor: Anthony F. Abell.

Foreign trade (1949): exports, Str.\$187,628,559; imports, Str.\$109,969,460. Chief export: petroleum (70%).

Agricultural products: rice, sago, pepper, rubber.

Minerals: petroleum (1949: 56,752 long tons), gold, silver, coal.

Sarawak extends along the northwestern coast of Borneo for about 500 miles. In 1841 part of the present territory was granted by the sultan of Brunei to Sir James Brooke. The state, enlarged by additional concessions made between 1861 and 1905, continued to be ruled by members of the Brooke family until the Japanese occupation in Dec., 1941. A British protectorate since 1888, Sarawak became a Crown colony July 15, 1946, through agreement between the British government and the then ruling rajah, Sir Charles Vyner Brooke.

The colony is mountainous and very well watered; inland communication is largely by water. Most of the inhabitants are Malays, Dyaks and Chinese. The principal mineral is petroleum, which was discovered at Miri in 1909 and subsequently worked by Sarawak Oilfields, Ltd. A large proportion of the petroleum exports reflects petroleum imported from Borneo and refined in Sarawak. There are also important forest resources. Under the enlightened rule of the Brookes, Sarawak had been developed into a highly organized community prior to the Japanese invasion.

Sarawak's climate, though tropical, is healthful; the temperature seldom rises above 90° and falls to 70° at night. Average annual rainfall at Kuching is 160 inches.

Ceylon (Dominion)

Area: 25,332 square miles.

Population (est. June 30, 1949, 7,290,000 (Sinhalese, 68%; Tamil, 22%; Moors, 6%; Burghers and Eurasians, .5%; Europeans [5,292] and others, 3.5%).

Density per square mile: 287.8.

Governor General: Lord Soulbury.

Prime Minister: Stephen Senanayake.

Principal cities (est. 1949): Colombo, 331,700 (capital); Jaffna, 67,500 (fibers, tobacco); Dehiwala-Mt. Lavinia, 56,000 (1946) (suburb of Colombo); Kandy, 54,300 (tea).

Monetary unit: Ceylonese rupee.

Languages: English, Sinhalese, Tamil.

Religions (est.): Buddhism, 60%; Hinduism, 20%; Christianity, 10%; Mohammedanism and others, 10%.

HISTORY. The youngest dominion in the British Commonwealth, the island of Ceylon lies in the Indian Ocean 12 miles southeast of the southern tip of India at the closest point of proximity. Known to the Greeks and Romans as Taprobane and to Mohammedan seamen as Serendib, it is reputed to have been invaded from India in 504 B.C. by Vijaya, the first Sinhalese king. Buddhism was introduced in the third century B.C. In subsequent centuries the island was invaded and occupied several times by Indian princes.

Ceylon was visited in 1505 by the Portuguese, who found the island divided into seven native kingdoms. The Portuguese settlers were ousted in the middle of the 17th century by the Dutch, who in turn were defeated by an English force in 1796. Ceylon became a Crown colony in 1796, and was formally ceded to England by the treaty of Amiens in 1802.

The Donoughmore constitution of 1931 vested control over most local affairs in a state council, which had an elected majority. The arrangement proved generally unacceptable, and after World War II a commission headed by Lord Soulbury

drafted a new constitution. Elections held in Aug. and Sept., 1947, were won by the United Nationalists, a center group. The Ceylon Independence Act received royal assent on Dec. 10, 1947, and on Feb. 4, 1948, Ceylon became a full-fledged, self-governing dominion.

GOVERNMENT. Under the new constitution, Ceylon's government is headed by the Crown-appointed governor general, who is advised by a council of ministers headed by the prime minister. The bicameral parliament consists of a House of Representatives of 95 members elected by full adult suffrage, and a Senate composed of 15 elected and 15 appointed members.

Close relations in defense matters are maintained with the United Kingdom under terms of the 1947 defense agreement, which permits the stationing of British troops on the island. The Royal Navy has an extensive base at Trincomalee.

SOCIAL AND ECONOMIC CONDITIONS. Free education is available in public schools from kindergarten to university, and the level of literacy is high. In 1947 there were 5,303 Sinhalese and Tamil schools with 748,629 pupils and 423 English and bilingual schools with 108,680 pupils. The University of Ceylon (founded in 1942) had 1,590 students in 1947.

Sinhalese, spoken by approximately two-thirds of the population, is an Aryan tongue closely related to Pali.

Ceylon is heavily dependent on food imports, particularly rice, the staple food. A large part of the cultivated land (25% of the total area) is devoted to the chief export crops—tea (1949: 135,401 metric tons), rubber (90,901 metric tons) and coconut products, all of which are grown for the most part on plantations. Other crops include rice (303,667 tons paddy), fruits, cinnamon and citronella. In 1948, there were 1,133,481 cattle, 658,468 buffalo and 369,712 goats.

Recent foreign-trade data are as follows (in millions of Ceylonese rupees):

	1947	1948	1949
Exports	884	1,011	1,063
Imports	963	994	1,030

Chief exports by value in 1949 were tea (61 per cent), rubber (11.7 per cent) and coconut oil (11.4 per cent). Leading customers were Britain (31 per cent), the U. S. (10 per cent) and Australia (8 per cent); leading suppliers, Britain (18 per cent), Burma (15 per cent) and India (15 per cent).

Ceylon is well served by highways and the government railway, which total 18,560 and 894 miles respectively. A fast ferry connects railheads in India and Ceylon.

Revenue in 1949-50 (Oct. 1-Sept. 30) was estimated at Rs. 563,700,000 (actual

1948-49: Rs. 576,063,000), and expenditure at Rs. 563,511,000 (actual 1948-49: Rs. 547,-864,000). The net public debt on Sept. 30, 1949, was Rs. 443,912,000.

NATURAL FEATURES AND RESOURCES. Most of the island is flat, but mountains in the south central part rise to 8,000 feet. The island extends to a maximum of 270 miles north and south, and 140 miles east and west. There are numerous rivers, the longest of which is the Mahaweli-Ganga (206 miles).

Mineral resources include graphite (plumbago) (1948 exports, 13,969 long tons), gem stones, mica, magnesite and vanadium; uranium deposits have been reported.

A distinctive feature of Ceylon's climate is the monsoon, which appears in May and in October-November. Annual rainfall varies from 40 inches in the northeast to more than 200 in the southwest. The mean annual temperature at Colombo is 80.5°.

MALDIVÉ ISLANDS. These islands, a group of 12 coral atolls, are a Ceylonese dependency located about 400 miles to the southwest. The population, almost entirely Mohammedan, is about 100,000. Under the hereditary sultan, Amir Abdul Majid Didi, the Maldives have a popular government headed by a prime minister. Fishing and coir making are the leading industries.

CYPRUS—Status: Colony.

Capital: Nicosia (pop. 1949: 37,263).

Governor: Sir Andrew B. Wright.

Foreign trade (1949): exports and re-exports, £8,880,659; imports, £11,013,230. Chief export: food.

Agricultural products: barley, wheat, potatoes, wine, fruit.

Minerals: copper ore (concentrates), pyrite ore.

Cyprus, third largest island in the Mediterranean, is roughly equidistant from Asia Minor to the north and Syria to the east. The site of early Phoenician and Greek colonies, it passed in 1571 from the rule of Venice to that of the Ottoman Empire, under which it remained until 1878, when it was ceded to Great Britain for administrative purposes. On the outbreak of hostilities with Turkey in World War I (Nov. 5, 1914), the island was formally annexed to Great Britain.

The governor is advised by a nominated Executive Council, but he alone possesses the lawmaking power.

Jewish refugees who attempted illegal entry into Palestine during 1946 and 1947 were shipped to Cyprus by the British for internment.

The people are mainly Greeks and Turks, although there is an Armenian colony and a distinct, though small, Latin colony. More than 80 per cent of the population is Christian. Agriculture is the principal

industry. Sponge fishing is also important, as well as copper mining.

The mean annual temperature is about 69°; annual rainfall averages about 19 inches. A cool, wet season lasts from October to March.

HONG KONG—Status: Colony.

Capital: Victoria (population 767,000).

Governor: Sir Alexander Grantham.

Foreign trade (1949): exports (in Hong Kong dollars), \$2,349,100,000; imports, \$2,789,400,000. Chief export: textiles.

Agricultural products: rice, sugar cane. Major industries: shipbuilding, rope making, cement, sugar refining, textiles.

The colony of Hong Kong comprises the island of Hong Kong (32 sq. mi.), Stonecutters' Island, and the Kowloon peninsula and the New Territories on the adjoining mainland. The island of Hong Kong, located at the mouth of the Canton River about 90 miles southeast of Canton, was ceded to Britain in 1841.

Stonecutters' Island and Kowloon were annexed in 1860, and the New Territories, which are mainly agricultural lands, were leased from China in 1898 for 99 years. Hong Kong was attacked by Japanese troops Dec. 7, 1941, and surrendered the following Christmas Day. It remained under Japanese occupation until Sept., 1945.

Possessing an excellent natural harbor 17 miles in extent, the only safe deep-sea anchorage between Shanghai and Indo-China, Hong Kong is the entrepôt for trade throughout southern China and the western Pacific. Re-exports normally constitute about two-thirds of the imports and nine-tenths of exports. The colony is also an important British military and naval base.

The cities of Victoria and Kowloon contain the greater part of the population, which is overwhelmingly Chinese. Besides those Chinese engaged in agriculture or industry, a large population lives in sampans or junks either in Victoria Harbour or neighboring bays, supporting itself by fishing or by laboring on the wharves. About 20 per cent of the total area of Hong Kong is under cultivation, mostly in the New Territories. Manufacture of consumer's goods, both for local consumption and for export, is also important.

Hong Kong has an agreeable climate, although violent typhoons sometimes descend upon the colony. The average annual temperature is 72°, ranging from 59° in February to 82° in July. The summer is the rainy season.

MALAYAN FEDERATION and SINGAPORE—Status: Protectorates and Crown Colony.

Capital: Singapore (population 1947: 441,885).

Federation Capital: Kuala Lumpur (population 1947: 176,195).

Commissioner General in Southeast Asia: Malcolm MacDonald.

High Commissioner of Malayan Federation: Sir Henry Gurney.

Governor of Singapore: Sir Franklin Gimson.

Foreign trade (1949): exports, Str.\$1,678,-933,000; imports, Str.\$1,840,190,000. Chief exports: rubber (44%), tin (16%).

Agricultural products: rubber (1949: 671,503 long tons), rice, coconuts.

Minerals: tin ore (1949: 61,300 short tons), iron ore, tungsten, bauxite, manganese ore.

Forest products: timber, damar, jelutong.

British Malaya consists of semi-independent states occupying most of the Malay peninsula and the island of Singapore off the peninsula's southern tip, together with several smaller islands. The native states were brought under British administration by a process of commercial and political exploitation in the late 19th and early 20th centuries. Singapore, founded in 1819 by Sir Stamford Raffles, had been developed into the principal British naval base in the Far East prior to World War II. Japanese troops invaded the Malayan States in December, 1941, and captured Singapore from the mainland February 15, 1942.

By Orders in Council effective April 1, 1946, the Malayan Union was formed from—the former "Federated Malay States" Perak, Pahang, Selangor, Negri Sembilan—the former "Unfederated Malay States"—Johore, Trengganu, Kelantan, Kedah and Perlis—and all parts of the former "Straits Settlements" except Singapore—thus including Penang and Malacca. The small island of Labuan, off Borneo, was transferred to jurisdiction of North Borneo. The Crown colony of Singapore, comprising the island of Singapore and its dependencies—the Cocos or Keeling Islands, and Christmas Island (about 200 miles south of Japan)—remains outside the Malayan Union.

After vigorous opposition, this arrangement was modified on Feb. 1, 1948, and the Malayan Union was replaced by the Malayan Federation, which has a federal executive and a federal legislative council presided over by the high commissioner. British influence in the affairs of the nine native states is limited to defense and foreign affairs. The sultan of each state has undertaken to promulgate a written constitution for his state. Singapore remains a Crown colony.

The Commissioner General in Southeast Asia is charged with the coordination of administration in the Malayan Federation, Singapore, Sarawak, North Borneo and Brunei.

Since June, 1948, a considerable number of British and other troops have had to be stationed in the area to cope with Com-

munist-led guerrillas. About 50 per cent of the population of the Federation is Malayan and 38 per cent Chinese; about 70 per cent of the population of the colony of Singapore is Chinese.

Rubber and tin form the basis of the area's prosperity. Over 60 per cent of the cultivable area is devoted to the growing of rubber, and prewar production accounted for 40 per cent of the world supply. Production recovered rapidly after the war. In 1940 Malaya produced 33.2 per cent of the world's output of tin; postwar recovery of the industry was slower than in the case of rubber, although by 1949 Malaya was again the world's chief producer.

The climate of Singapore, principal city of the area, is hot and humid, with practically no seasonal change; mean average temperature is 80°. The average number of rainy days is about 173.

India (Republic)

Area: c. 1,209,000 square miles.*

Population (est. 1950): 347,340,000* (Hindu [predominant], Moslem, Sikh, Christian, Buddhist).

Density per square mile: 287.3.*

President: Rajendra Prasad.

Prime Minister: Pandit Jawaharlal Nehru.

Principal cities (census 1941): Calcutta, 2,108,891 (chief port); Bombay, 1,489,883 (seaport; cotton and textiles); Madras, 777,481 (seaport); Hyderabad, 739,159 (trade center); Ahmedabad, 591,267 (manufacturing); Delhi, 521,849 (capital); Cawnpore, 487,324 (textiles, leather); Amritsar, 391,010 (Sikh holy city).

Monetary unit: Rupee.

Principal languages: English (official), Hindi, Marathi, Gujarati, Punjabi, Telugu, Bengali, Tamil, Kanarese.

* Figures include disputed Kashmir area.

HISTORY. The Republic of India is one of the largest, richest and most populous nations in the world. A sovereign republic within the Commonwealth of Nations, it contains most of pre-1947 India's industrial wealth and natural resources.

The Aryans or Hindus who invaded India between 2400 and 1500 B.C. from the northwest found a land already well civilized. Buddhism, founded in the 6th century B.C., had spread through northern India. The first exact date in Indian history is 327 B.C., the year that Alexander the Great invaded India. Meanwhile India continued to be divided into scores of rival states.

In 1526, Mohammedan invaders founded the great Mogul empire, centered on Delhi, which lasted at least in name until 1857. Akbar the Great (1542-1605) strengthened this empire and became the ruler of a greater portion of India than had ever

POLITICAL SUBDIVISIONS OF REPUBLIC OF INDIA, 1950

Provinces	Area, sq. mi. (approx.)	Population est. 1950		Area, sq. mi. (approx.)	Population, est. 1950
Assam	49,473	8,510,000	Rajasthan	128,356	14,690,000
Bengal (West)	28,230	24,320,000	Saurashtra	31,885	3,960,000
Bihar	70,368	39,420,000	Travancore-Cochin	9,155	8,580,000
Bombay	111,894	32,680,000	Vindhya Pradesh	24,610	3,880,000
Madhya Pradesh*	130,475	20,920,000	Centrally administered areas		
Madras	127,610	54,290,000	Ajmer-Merwara	2,400	730,000
Orissa	55,835	14,410,000	Andaman and Nicobar Islands	3,143	35,000
Punjab (East)	35,684	12,621,000	Bhopal	6,921	850,000
Uttar Pradesh†	108,010	61,620,000	Bilaspur	453	130,000
States and Unions of States			Coorg	1,593	170,000
Hyderabad	82,313	17,690,000	Cutch	8,461	550,000
Kashmir‡	82,258	4,370,000	Delhi	574	1,510,000
Madhya Bharat	46,298	7,870,000	Himachal Pradesh	11,254	1,080,000
Mysore	29,458	8,060,000	Manipur	8,620	540,000
Patiala and East Punjab	10,119	3,320,000	Tripura	4,049	580,000

* Formerly the Central Provinces. † Formerly the United Provinces. ‡ Status in dispute.

* Formerly the Central Provinces. † Formerly the United Provinces. ‡ Status in dispute with Pakistan.

before acknowledged the suzerainty of one man. The long reign of his great-grandson, Aurangzeb (1658-1707) represents both the culmination of Mogul power and the beginning of its decay.

Vasco da Gama, the Portuguese explorer, visited India first in 1498, and for the next hundred years the Portuguese had a virtual monopoly on trade with the subcontinent. Meanwhile, the English founded the East India Company, which set up its first factory at Surat in 1612 and began expanding its influence, fighting against the Indian rulers and the French, Dutch and Portuguese traders simultaneously.

Bombay, taken from the Portuguese, became the seat of English rule in 1687. The defeat of French and Mohammedan armies by Lord Clive in the decade ending in 1760 laid the foundation of the British Empire in India. From then until 1858, when the administration of India was formally transferred to the British Crown following the great mutiny of native troops in 1857, the East India Company was constantly occupied with the suppression of native uprisings and the extension of British rule.

After World War I, in which even the Mohammedan states of India sent troops to fight beside the Allies, Indian nationalist unrest rose to new heights under the leadership of a little Hindu lawyer, Mohandas K. Gandhi, called Mahatma Gandhi. His tactics, of a politico-religious nature, called for non-violent revolts against British authority. He soon became the leading spirit of the all-India Congress Party, which was the spearhead of Indian revolt against British rule. In 1919 the British gave added responsibility to Indian officials, and by an act passed in 1935 In-

dia was given a federal form of government and a measure of self-rule.

During the 1940's the policy of both the wartime coalition government of Britain and later the Labour Government envisaged an unpartitioned India as a self-governing federal dominion including both British India and the native states. In 1942, with the Japanese pressing hard on the eastern borders of India, the British war cabinet decided to send Sir Stafford Cripps to India to try to reach a political settlement with nationalist leaders. The mission failed. Shortly thereafter the Congress Party took the position that the British must quit India. In August 1942, fearing mass civil disobedience, the Government of India carried out widespread arrests of Congress leaders including Gandhi, Jawaharlal Nehru and Maulana Abul Kalam Azad, president of the Congress Party. Sections of the nationalist movement, mostly under the leadership of the socialist wing, went underground.

Gandhi was released in May, 1944, and other leaders later. Negotiations for a settlement were resumed and they proved fruitless until the British Labour Government sent a cabinet mission to India in 1946 consisting of Lord Pethick-Lawrence, A. V. Alexander and Cripps. The mission obtained the agreement of the Congress Party and Mohammed Ali Jinnah's Moslem League to a long-term plan for a constitution based on three separate groups of provinces with a minimal center. However, agreement was not reached on an interim government and the Moslem League later reverted to its position of unconditional partition. Finally, in February, 1947, the Labour Government announced its deter-

mination to transfer power to "responsible Indian hands" by June, 1948, even if a constitution had not been worked out by that time.

With the appointment at the same time of Lord Mountbatten as Governor General, events moved swiftly. By early June, 1947, agreement was reached on the partitioning of India along religious lines (a plan previously opposed by the predominant Hindus and by Britain) and on the splitting of the provinces of Bengal and the Punjab, which the Moslems had claimed in their entirety.

The Indian Independence Act, passed quickly by both houses of the British Parliament, received royal assent on July 18, 1947, and on Aug. 15 the Indian Empire, united under British rule for almost a century, passed into history.

Under the leadership of Pandit Jawaharlal Nehru, the new nation quickly took its place in world councils as a self-governing British dominion. At home it pursued a policy of integration and reorganization designed to place effective power in the hands of the central government, which was faced at the outset by widespread communal rioting climaxed by the assassination of Gandhi, the great Hindu spiritual leader, on Jan. 30, 1948.

GOVERNMENT. Since Jan. 26, 1950, India has been a sovereign republic within the Commonwealth of Nations—a status approved by the other Commonwealth nations at London in April, 1949, on the condition that India recognize the King as head of the Commonwealth. Under the constitution adopted by the Constituent Assembly on Nov. 26, 1949, India has a parliamentary type of government. The bicameral parliament is composed of the Council of States (250 members chosen by the constituent states) and the House of the People (not more than 500 members elected directly by popular vote for five-year terms). The president is elected for a five-year term by an electoral college composed of parliament and the elected members of the state legislatures. The cabinet, headed by the prime minister, administers the government and is collectively responsible to the House of the People. The constituent states have their own governors and popularly elected legislatures.

NATIVE STATES. Most of the 560-odd native states and subdivisions of pre-1947 India acceded to the new nation, and the central government pursued a vigorous policy of integration. This took three forms: (1) merger into adjacent provinces (230 states with an area of 110,700 sq. mi. and a population of 18,200,000), (2) conversion into centrally administered areas (8 states), and (3) grouping into unions of states (304 states with an area of over 236,000 sq. mi. and population of 37,600,-

000) of which there are six, in addition to the single states of Hyderabad, Mysore and Kashmir. The unions of states and the latter three states have been assimilated to the level of provinces, and have fully representative forms of government, subject to the power of the central government.

The status of the large princely state of Jammu and Kashmir on the northwest frontier is in dispute with Pakistan. It is 85 per cent Moslem, but its Hindu ruling prince acceded to India, which took over administration following invasion by Moslem troops in late 1947. The U. N. Security Council voted on April 21, 1948, to hold a plebiscite in the area, but by mid-1950, largely because of mutual distrust between India and Pakistan, arrangements had not been made for holding it.

The most important former princely state, Hyderabad, was forcefully taken over by Indian troops in Sept., 1948.

DEFENSE. In the division of the British Indian Army after the transfer of power, India received 45 regiments approximating 250,000 men. Total land strength in 1948 was about 400,000 men, including 25,000 Nepalese Gurkhas. A national guard of 130,000 men was in the process of formation. The division of the Royal Indian Air Force gave India 1 transport and 7 fighter squadrons. The Indian navy has 1 cruiser (ex-H.M.S. *Achilles*), 3 destroyers, 4 sloops, 2 frigates, 12 minesweepers and several smaller vessels. Almost all the senior officers in the three services are now Indian.

EDUCATION. Plans were under way in 1950 for large-scale expansion and modernization of all branches of education, with emphasis on technological training. Detailed data, however, were not available. In 1948 there were 17 universities. English is being replaced as the language of instruction by Indian languages.

AGRICULTURE. Over 200,000,000 acres are under cultivation, but India probably will continue to be a food-deficit area for several years. Rice is the staple food crop; cotton, tea and jute are important cash crops. Production estimates for the crop year 1948-49 include rice, 18,863,000 long tons; sugar cane, 4,984,000 tons; jute, 366,900 tons; peanuts, 3,073,000 tons; sesame, 295,000 tons; cotton, 1,750,000 bales of 400 lb. each; tea (1947-48), 550,000,000 lb. India within its present area was estimated to have had, in 1945, 556,000 horses, 136,369,000 cattle, 3,704,000 pigs, 37,731,000 sheep, 46,469,000 goats, 40,610,000 buffalo and 193,000 camels.

MANUFACTURING. The republic retained almost all the industrial facilities of British India and is among the ten leading industrial nations of the world. Cotton

and jute manufacturing are the two largest industrial activities, the former concentrated largely in Bombay and the latter in Calcutta. The provinces of West Bengal and Bombay are the two most important areas of industrial concentration, with Madras ranking third in importance. In 1949, upwards of 850 cotton mills produced 1,359,500,000 lb. of yarn and 3,918,000,000 yards of cloth. Processing of sugar is of great importance; in 1949, 142 factories produced 1,042,363 tons. About 90 per cent of the world's supply of jute is processed in the republic. The annual steel capacity is 1,264,000 tons, of which the huge Tata Works in Bihar account for 850,000. Total production in 1949 was 1,518,000 short tons; that of pig iron and ferroalloys, 1,729,000 short tons. The production of silk and woolen goods, vegetable oils, coir yarn, paper, matches, salt, cement, leather and shoes, and heavy chemicals is also important.

COMMUNICATIONS. The division of the British Indian railway system gave the republic 33,865 miles of track, all under government control. The chief ports are Bombay and Calcutta. The merchant marine totaled about 300,000 tons in 1948. Roads in 1948 totaled 296,438 miles. In 1949, seven airlines operated 22,092 miles of internal air service and three overseas services.

TRADE. India is primarily an importer of finished manufactured goods and an exporter of raw materials and semimanufactured products. Recent trade data are as follows (in millions of rupees):

	1948-49*	1949-50
Exports	4,228	4,995
Imports	5,188	5,851†

* Sea- and air-borne trade only.

† Excluding overland trade with Pakistan.

The leading customers in 1949-50 were Britain, 23 per cent; the U. S., 16 per cent; Pakistan, 8 per cent; Australia, 5 per cent; and Burma, 3 per cent. Leading suppliers included Britain, 25 per cent; the U. S., 15 per cent; Egypt, 7 per cent; Pakistan, 7 per cent. Leading exports in 1948-49 were jute and jute manufactures, 40 per cent; tea, 14 per cent; and cotton and cotton manufactures, 13 per cent. Leading imports included machinery, grain and flour, raw cotton, petroleum and vehicles.

MINERALS. The republic has rich mineral resources. The most valuable mineral is coal, deposited throughout most of the nation; production in 1949 was 31,457,167 tons. Manganese ore (800,000 tons in 1948) is mined in Madhya Pradesh, and gold in Orissa. Assam and the Punjab produce oil. Other minerals include iron ore, monazite, diamonds, magnesite, uranium, zircon, silver, graphite, gypsum, tungsten ore and sapphires.

FINANCE. The 1950-51 budget on revenue account estimated revenue at Rs. 3,391,-874,000 and expenditure at Rs. 3,378,807,-000. The budget was not strictly comparable with those for preceding years because of the integration on Apr. 1, 1950, of the federal finances of the former Indian states with those of the central government. The budget on capital account estimated revenue at Rs. 1,277,700,000 and expenditure at Rs. 1,517,100,000. The railway budget is separate. The public debt on March 31, 1948, was about Rs. 17,953,600,000.

TOPOGRAPHY. Occupying the center of the Indian subcontinent, the main part of the republic is shaped somewhat like an arrowhead, with the tip located at the south. In the northern section are the Himalayas, south of which lie extensive plains drained by the Ganges and Brahmaputra river systems. The republic contains a large part of the great Indo-Gangetic plain which extends from the Bay of Bengal on the east to the Afghan frontier and the Arabian Sea on the west. This plain is the richest and most densely settled part of the subcontinent, containing more than half the population. Another distinct natural region is the Deccan, a plateau of 2,000 to 3,000 feet elevation, occupying the southern or peninsular portion of the subcontinent. In several regions, the Deccan is quite mountainous.

Forming a part of the republic are several groups of islands—the Laccadives (14 islands totaling about 80 sq. mi.) in the Arabian Sea; the Andamans (204 islands totaling 2,508 sq. mi.); and the Nicobars (19 islands totaling 635 sq. mi.) in the Bay of Bengal.

India's three great river systems, all rising in the Himalayas, have extensive deltas. The Ganges flows south and then east for 1,540 miles across the northern plain to the Bay of Bengal; part of its delta, which begins 220 miles from the sea, is within the republic. The Indus, starting in Tibet, flows northwest for several hundred miles in Kashmir before turning southwest toward the Arabian Sea; it is important for irrigation in Pakistan. The Brahmaputra, also rising in Tibet, flows eastward first through India and then south into Pakistan and the Bay of Bengal.

CLIMATE. India's climate varies from temperate in the north to tropical in the south, where temperatures are almost constant the year around. During the November-February cool season, northern India has a climate like that of the Riviera. From March to June steadily rising temperatures reach a peak sometimes as high as 115°, and then comes the southwest monsoon. Rainfall is heavy in most of the Union, averaging 50 to 60 inches in Assam and reaching 500 inches in the Assamese Garo hills.

Pakistan (Dominion)

Area: 337,524 square miles.*

Population: 73,321,000* (Moslem [about 80%], Hindu, Sikh).

Density per square mile: 217.2.*

Governor General: Khwaja Nazimuddin.

Prime Minister: Liaquat Ali Khan.

Principal cities (census 1941): Lahore, 671,659 (Punjab manufacturing center); Karachi, 359,492 (capital); Dacca, 213,218 (capital, East Pakistan); Rawalpindi, 181,169 (military center); Multan, 142,768 (Punjab trading center).

Monetary unit: Pakistani rupee.

Principal languages: English, Bengali, Punjabi, Urdu, Hindi.

* Unofficial estimate.

HISTORY. Pakistan, a self-governing dominion of the Commonwealth of Nations and one of the two successor states to British India, is the world's largest and most important Moslem state.

The history of Pakistan prior to 1947 is principally that of India. (See India.) Its creation was to a large extent attributable to Mohammed Ali Jinnah, who envisaged and pressed for the idea of a predominantly Moslem state carved out of the Moslem areas of British India. Upon the transfer of power on Aug. 15, 1947, Jinnah became the first governor general; he died on Sept. 11, 1948, and was succeeded by Khwaja Nazimuddin, then prime minister of eastern Pakistan.

GOVERNMENT. Pending the promulgation of a definitive constitution, Pakistan has a provisional government which is federal in nature. The governor general represents the Crown and is advised by the prime minister and his cabinet, who are responsible to the constituent assembly, which has both legislative and constitution-making powers. The provincial legislatures enjoy autonomy in certain fields; the provincial governors are appointed by the governor general on advice of the dominion cabinet.

PROVINCES. Pakistan consists of two large sectors approximately 1,000 miles apart, separated by the Republic of India: in the northwest, Sind, Baluchistan, the North-West Frontier Province, western Punjab, the princely state of Bahawalpur, and a few other small native states; in the northeast, eastern Bengal and the Sylhet district of Assam. It contains large communal minorities of Hindus and Sikhs. Over half the dominion's population is concentrated in east Bengal, which contains only 15 per cent of the total area.

DEFENSE. In the division of the British Indian Army, Pakistan received 20 regiments, which, with levies and contributions of native princes, made a total army strength of about 250,000 in 1949. The Royal Pakistan Navy has a force of 2 sloops, 2 frigates, 6 mine sweepers and sev-

eral smaller vessels. The air force has 1 transport and 2 fighter squadrons. The armed forces have several hundred British officers in dominion service.

SOCIAL AND ECONOMIC CONDITIONS. Pakistan, poor in industry and natural resources, is primarily an agricultural nation. Upwards of 45,000,000 acres are under cultivation, almost half of which are irrigated, largely in Sind and west Punjab in western Pakistan. The Punjab contains important wheat-growing areas, and eastern Pakistan is rich in jute, rice and tea. Production estimates for the crop year 1948-49 included wheat, 3,985,000 long tons; rice, 11,437,000 tons (paddy); maize, 412,000 tons; barley, 179,000 tons; tea, 45,690,000 lbs.; jute, 978,400 tons; cotton, 1,011,000 bales of 400 lbs. each. In 1947-48 there were 24,296,000 cattle, 6,145,000 sheep, 5,600,000 buffalo, 454,000 camels and 470,000 horses.

Pakistan is an exporter of agricultural products and an importer of manufactured commodities. Leading exports include raw jute, cotton, wool and hides; imports include cloth, iron and steel products and coal. Exports in the trade year 1948-49 were estimated at Rs. 922,800,000, and imports at Rs. 1,179,600,000.

Development of a unified nation is retarded by the fact that communication between east and west Pakistan is possible only through a thousand miles of Indian territory or by a long sea voyage. In the division of the British Indian railways, Pakistan received 6,659 miles of track. Western Pakistan has an estimated road mileage of 46,000, about half of which is suitable for motor traffic. Eastern Pakistan has few roads for motor vehicles, but there are about 2,800 miles of waterways navigable by small steamers. On Dec. 31, 1948, the merchant marine had 19 vessels aggregating 87,703 gross tons. Karachi, the chief port, is the distribution center for north India and has the most important airport on the subcontinent. Chittagong is being developed as a port for eastern Pakistan.

Pakistan's industries supply only a small part of the dominion's requirements. The most important manufacturing area is in the vicinity of Lahore in the Punjab. Industries include cotton ginning, spinning and weaving, sugar refining, cement making, flour milling, railway and engineering workshops and two petroleum refineries.

Mineral resources are limited. Production in 1949 included petroleum, about 750,000 barrels; coal and lignite, 336,000 metric tons; (1948) chromite, 16,000 tons; gypsum, 16,000 tons.

The preliminary budget for the fiscal year 1950-51 estimated ordinary revenue at Rs. 1,136,400,000 on the basis of existing taxation, and expenditure at Rs. 1,155,400,000.

TOPOGRAPHY AND CLIMATE. Almost all

of Sind and the west Punjab are a continuation of north-central plains leading up to rugged mountains in the north and west which traverse Baluchistan and the North-West Frontier Province. Eastern Pakistan is a low-lying, flat country with elevation averaging not more than 600 feet above sea level.

Numerous rivers flow southward into western Pakistan from the Himalayas; the greatest one, the Indus, enters the Arabian Sea near Karachi. Many barrages form the basis of artificial irrigation systems; land outside the reach of river water is either desert or semiarid. Several rivers with numerous branches cover eastern Pakistan and provide natural irrigation; the area includes part of the Ganges delta.

Western Pakistan has a brisk, cool season between November and March, with average mean temperature of about 60°, and an extremely warm period between April and November, with an average mean of 85°. Rainfall averages about 10 inches a year, of which Sind may receive as little as 6.3 in. Eastern Pakistan is within the range of the summer monsoon, with average annual rainfall of 85 in. The average maximum temperature varies between 75° and 100° during April to June; the minimum, between 45° and 60° during November to January.

OCEANIA

Australia, Commonwealth of (Dominion)

Area: 2,974,581 square miles.

Population (est. 1949): 7,911,806 (excluding full-blooded aborigines estimated at 50,000).

Density per square mile: 2.7.

Governor General: William John McKell.

Prime Minister: Robert Gordon Menzies.

Principal cities (census 1947): Sydney, 1,484,434 (seaport, wool market); Melbourne, 1,226,923 (seaport, wool, wheat); Brisbane, 402,172 (seaport, industrial center); Adelaide, 382,604 (seaport); Perth, 272,586 (western seaport); Canberra, 15,156 (capital).

Monetary unit: Australian pound (£A).

Language: English.

Religions (census 1947): Anglican, 39.0%; Roman Catholic, 20.7%; Presbyterian, 9.8%; Methodist, 11.5%; other Christians, 7.1%; others, 11.9%.

HISTORY. Australia was the last continent to be discovered. The first Europeans to land were the Dutch, who sailed into the Gulf of Carpentaria in March, 1606. Later in the same year, Luis Vas de Torres, a Spaniard, sailed through the strait subsequently named for him, and may have touched at several points on the north coast. In 1642 Abel Tasman (for whom Tasmania was named) sailed from west to east along the southern shore and proved

that Australia was not a part of the Antarctic continent. The continent was named New Holland, and it was so called until about 1850.

In 1770 Captain James Cook, after visiting New Zealand, sailed to the east coast of New Holland and landed south of the present city of Sydney. His account of the country led to its being claimed and settled by Great Britain.

The first settlement, made in 1788 at Botany Bay, was founded as a penal station for criminals from England. Transportation of criminals was virtually suspended in 1839, and Australia had comparatively few white settlers until gold was discovered in Victoria in 1851, after which immigrants poured in. By 1860 all the states (then separate colonies) except Western Australia had been granted responsible government.

On January 1, 1901, the six Australian states united to form the Commonwealth of Australia. The Commonwealth supported Great Britain wholeheartedly in World War I, sending 329,883 troops abroad, all volunteers, of whom 59,258 were killed, died or were missing. The financial drain on a nation of less than 6,000,000 population was extremely heavy.

The Commonwealth again declared war on Germany September 3, 1939; and in 1940-42, Australian troops distinguished themselves in the African, Balkan, Crete and Malayan campaigns. With the Japanese invasion of Southeast Asia and New Guinea in late 1941 and early 1942, Australia was threatened with invasion for the first time in 150 years. The Commonwealth became a vast base for U. S. troops, and Gen. Douglas MacArthur set up his headquarters there on March 17, 1942.

In the general elections held August 21, 1943, Prime Minister John Curtin's Labour government was confirmed in office. Curtin died July 5, 1945, and was succeeded by Joseph B. Chifley, also of the Labour party. The Crown's appointment, on Commonwealth recommendation, of the Hon. William J. McKell, a local Labourite, to the office of Governor General, Jan. 31, 1947, to succeed the Duke of Gloucester, was bitterly criticized by the opposition. The Labour government was soundly defeated by the Liberal-Country-party coalition in general elections held Dec. 10, 1949, and Robert Gordon Menzies, the Liberal leader, became Prime Minister on Dec. 15.

GOVERNMENT. Australia, a self-governing member of the British Commonwealth of Nations, is a federal union of six states (New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania) and two territories (Northern Territory and Australian Capital Territory). The Constitution is modeled to some extent on that of the United States.

Federal legislative power is vested in a Parliament of two houses—the Senate with 60 members (10 for each state) and the House of Representatives with 121 members (plus 2 members without vote who represent the territories) elected on a population basis.

Executive power nominally is exercised by the King, through the Governor General, who is appointed by him. Actually, however, the Commonwealth is administered by the Prime Minister and the Cabinet members, who are responsible to the House of Representatives and must enjoy its confidence. The House of Representatives continues its sessions for three years from the date of its first meeting, unless sooner dissolved. Senators are chosen for six years, but the Senate may be dissolved in the event of prolonged disagreement with the House. The party alignment in the House after the elections held Dec. 10, 1949, was as follows: Liberal 54, Country 20 and Labour 47.

Each of the states is headed by a governor appointed by the British Crown and advised by the Prime Minister and his Cabinet; the latter actually administer the government. As in the U. S., the state governments retain the powers not specifically delegated to the federal government. The Northern Territory is administered by the federal government.

Federal judicial power is vested in a Federal Supreme Court of 7 justices, appointed by the Governor General in Council. Each state has its own judicial system.

The army's peacetime strength is stabilized at about 20,000 men, all volunteers. The navy has a strength of about 10,500 men, with 2 light aircraft carriers, 3 cruisers, 10 fleet destroyers, 14 escort destroyers and frigates, and many other smaller craft in service. The air force has a strength of about 7,000. During World War II, 350,000 men served overseas; casualties totaled 95,923, including 31,123 killed.

SOCIAL AND ECONOMIC CONDITIONS. Normal primary education is provided free by the states. In 1946 there were 8,271 state schools with average attendance of 835, 145 and 1,817 private schools with average attendance of 277,691. The 8 universities had a total enrollment of 30,477 in 1947.

Australia is the world's chief producer of wool, and sheep farming is the Commonwealth's most important single industry. About 55 per cent of Australia's total area is suitable (mining excepted) only for pastoral pursuits. On March 31, 1949, there were 108,735,432 sheep, 14,123,610 cattle, 1,196,321 hogs and 1,114,500 horses. The production of wool in 1948-49 was 460,268 long tons (greasy); butter, 165,699 tons; and cheese, 43,320 tons. Production of meat

averages 1,000,000 long tons annually; it was 971,478 tons in 1948-49.

The most important crop is wheat; the areas of heaviest production are in South Australia and New South Wales, but production in Western Australia is rapidly increasing. In 1949, 12,528,000 acres were devoted to wheat. Production in 1948-49 was 5,108,106 long tons. Production of oats was 421,464 tons; barley, 396,987 tons; and maize, 129,975 tons.

Sugar and cotton are grown in Queensland and New South Wales, tobacco in northeast Victoria, and vines chiefly in South Australia and Victoria.

Australian industry has made rapid progress, with the value of industrial output tripling between 1915 and 1940. Manufacturing is concentrated in or near the capital cities and is mainly concerned with primary production such as the processing of pastoral products, although heavy industrial goods are being manufactured in increasing volume. New South Wales is the leading industrial state. Power for industry is derived almost entirely from coal. In 1948-49 there were 40,017 factories employing 890,011 workers and producing net output valued at £A568,187,000 and gross output valued at £A1,424,624,000.

Trade statistics for three years (in millions of Australian pounds) are as follows:

	1946-47	1947-48	1948-49
Exports	809.0	407.4	547.2
Imports	208.3	338.3	414.0

In 1948-49 leading customers were Britain 42 per cent, France 8 per cent, the U. S. 6 per cent, and Italy and India, each 5 per cent. Leading suppliers were Britain 50 per cent, the U. S. 10 per cent and India 6 per cent. Chief exports were wool 42 per cent, wheat 12 per cent, flour 6 per cent, meat 5 per cent and butter 4 per cent.

The principal ports are Sydney, Melbourne and Adelaide. Railway mileage in 1949 totaled 27,716; roads, over 500,000. Civil aviation is under Commonwealth control. The merchant marine on Dec. 31, 1948, had 2,187 ships with net tonnage of 363,593. On Dec. 31, 1949, there were 1,066,385 telephones, 1,986,180 radios and 1,304,773 motor vehicles, including 702,380 automobiles.

Revenue (actual 1948-49) was £A554,377,372 (estimated 1949-50: £A544,000,000); expenditure (actual 1948-49): ordinary £A358,768,464, defense £A195,608,908 (estimated 1949-50: ordinary £A408,498,000, defense £A170,502,000). The public debt on June 30, 1948, was £A2,912,717,000.

NATURAL FEATURES AND RESOURCES. Australia is approximately equal in area to the United States and is more than three-fourths the size of Europe. Much of the continent is an arid plain with neither

high mountains nor large forests. The coast line is unusually regular, but two great peninsulas jut out toward New Guinea in the north—Cape York Peninsula and Arnhem Land. Between them lies the Gulf of Carpentaria. A wide bay, the Great Australian Bight, cuts into the south coast. Along the east coast, ranges of mountains run from north to south, reaching their highest point in Mt. Kosciusko (7,352 ft.). West of the mountains are three plains, one drained by the Murray and Darling Rivers which flow into the sea southeast of Adelaide, the second draining into Lake Eyre, a salt lake, and the third—a tropical plain—bordering the Gulf of Carpentaria. The western half of the continent is occupied by a desert plateau which rises into barren, rolling hills near the west coast. It includes the Great Victoria Desert, to the south, and the Great Sandy Desert to the north. The island of Tasmania (26,215 sq. mi.), lying off the southeastern coast, is largely a plateau.

Australia possesses considerable mineral resources. The value of mineral output in 1948 was £A64,400,000. Most important is gold (1949 output: 896,872 ounces). Second in importance is coal, mined near Sydney, Brisbane and in eastern Tasmania (1949 output: 14,098,000 long tons plus 7,369,000 tons of brown coal). The Broken Hill mines in New South Wales are one of the most valuable silver-lead-zinc areas in the world. Silver production in 1948 was 10,057,519 ounces; lead, 216,955 long tons; and zinc, 190,469 tons. Other important minerals include tin (1,874 tons), copper (12,368 tons), iron ore (2,053,599 tons) and uranium.

Forest products include timber (rough sawn), eucalyptus oil, sandalwood oil, tan bark and yacca gum. Sea products include bêche-de-mer, oysters, pearls, pearl shell, tortoise shell and agar-agar.

CLIMATE. The northern third of the country lies within the torrid zone and the remainder within the south temperate zone. The coolest portion of the mainland (Victoria) is not unlike Spain and south Italy. The average temperature for Australia as a whole is 70°, and the northern coastal areas average 82°. Only in the center of the continent does the annual range of temperature exceed 30°. Large areas of the continent receive less than 10 inches of rain. The eastern highlands and Victoria are the best-watered regions.

Norfolk Island, under Commonwealth administration since 1914, lies about 800 miles east of New South Wales. It enjoys a delightful subtropical climate. Citrus fruits, bananas and coffee are grown.

PAPUA (British New Guinea)—Status: Territory under Australian administration.
Administrator: J. K. Murray.
Capital: Port Moresby (population 3,000).

Chief exports: rubber, gold.
Agricultural products: coconuts, rubber, copra.

Minerals: gold, silver.

Comprising the southeastern part of the island of New Guinea, with the islands of the D'Entrecasteaux, Louisiade and adjoining groups, Papua was annexed by Queensland in 1883 and by the British Crown in 1888. It came under the control of the Australian Commonwealth in 1901 and became the Territory of Papua in 1906. Japan invaded Papua in early 1942, but with the capture of Buña in December, 1942, Australian control was restored.

In 1947 there were 2,000 Europeans in the territory. About 280,000 acres of land have been leased, chiefly by planters, and more than 82,000 acres are cultivated.

NEW GUINEA, Territory of—Status: U. N. trust territory.

Seat of administration: Port Moresby.

Administrator: J. K. Murray.

Chief export: gold.

Agricultural products: coconuts, cacao.

Minerals: gold, silver, platinum.

The northern section of eastern New Guinea (about 93,000 sq. mi.) was mandated in 1920 by the League of Nations to the government of the Commonwealth of Australia, together with the Bismarck Archipelago (New Britain, New Ireland and adjacent islands), the Admiralty Islands with several outlying groups, and the northern Solomon Islands (Bougainville and Buka). It was placed under United Nations trusteeship Dec. 13, 1946, but Australia continues to be the administering power. The administrator advises the Governor General of Australia, who can legislate by ordinance. Indirect rule by native chiefs has been continued. Japanese troops occupied much of the territory in 1942-45.

FIJI—Status: Colony.

Governor: Sir Leslie Brian Freeston.

Capital: Suva (population 25,395).

Foreign trade (1949): exports, £6,843,866; imports, £6,990,977. **Chief exports:** sugar (45%), gold, coconut oil.

Agricultural products: sugar (exports 1949: 110,968 long tons), copra, bananas, molasses.

Mineral: gold (1949: 104,115 oz.).

Fiji colony consists of an archipelago of from 200 to 250 islands in the South Pacific Ocean about 1,740 miles northeast of Sydney, Australia. The larger islands, including Viti Levu (4,053 sq. mi.) and Vanua Levu (2,130 sq. mi.) are mountainous and of volcanic origin. The archipelago was ceded to Great Britain by the native ruler in 1874.

The population in 1949 included 126,650 Fijians and 133,941 British Indians. Importation of the latter to work the sugar plantations has led to important social and

economic changes. There has been almost no intermarriage between Fijians and Indians, and considerable ill feeling has developed between them.

During World War II, the archipelago was an important air and naval station on the route from the U. S. west coast and Hawaii to Australia and New Zealand.

Fiji has a pleasant climate, with the temperature seldom leaving the 60°-90° range; rainfall is heavy in the southeastern three quarters of the archipelago, averaging 10-12 ft. annually, but is almost nil in the northwestern quarter.

NAURU—Status: U. N. trust territory.

This small island (8 sq. mi.), an important source of phosphate (exports 1947-48: 265,000 tons) was annexed by Germany in 1888 and was placed under joint Australian, New Zealand and British mandate after World War I. In 1947 it was placed under U. N. trusteeship, with the same three administering powers. It lies about 2,215 miles northeast of Sydney and to the northeast of the Solomon Islands.

New Zealand (Dominion)

Area: 103,416 square miles (104,242 including outlying and annexed islands).

Population (est. Dec. 31, 1949): 1,902,460 (1945: Europeans, 93.5%; Maori, 5.8%; others, .7%).

Density per square mile: 18.4.

Governor General: Sir Bernard Freyberg.

Prime Minister: Sidney G. Holland.

Principal cities (est. 1949): Auckland (greater), 298,900 (seaport and naval base); Wellington (greater), 189,900 (capital); Christchurch, 167,900 (cereals, stock raising); Dunedin City, 89,900 (textiles, meat freezing).

Monetary unit: New Zealand pound (£NZ).

Language: English.

Religions (census 1945): Church of England, 37.5%; Presbyterian, 23.4%; Roman Catholic, 13.4%; Methodist, 8.2%; Baptist, 1.7%; others, 15.8%.

HISTORY. New Zealand, about 1,250 miles east of Australia, consists of two main islands and a number of smaller outlying islands so scattered that they range from the tropical to the antarctic. The islands, which have approximately the area of Italy, were discovered and named New Zealand in 1642 by Abel Tasman, a Dutch navigator. Captain James Cook explored them in 1769 and after him came many other sailors, sealers, whalers and traders. English missionaries landed in 1814 but made slow progress. On Jan. 22, 1840, to head off a possible French move to claim New Zealand, Britain formally annexed it. The New Zealand Company was formed the same year.

New Zealand was granted self-government in 1852, a full parliamentary system and ministries in 1856 and dominion status on Sept. 26, 1907. Meanwhile from 1861 to 1871 there was fierce intermittent fighting with the native Maoris. Gold was first discovered in 1853.

New Zealand's Labour party came to power in 1935 for the first time, with Michael J. Savage as Prime Minister. The party began a program of liberal economic and social measures and it was again successful in the 1938 elections.

When Savage died in 1940, he was succeeded by Peter Fraser, who formed a special war cabinet (New Zealand had joined Britain in the war against the Axis in September, 1939). In World War II, New Zealand troops fought in Egypt, Greece, Crete, North Africa, Sicily and Italy, and the islands served as a major base for U. S. troops in the Pacific war.

After 14 years in power, the Labour party was defeated at the general election of Nov. 30, 1949, and the National party took office with Sidney G. Holland as Prime Minister.

GOVERNMENT. New Zealand is a self-governing dominion of the British Commonwealth of Nations. The British Crown is represented by a Governor General named by the King after consultation with the New Zealand government. Parliament has two houses—the thirty-six-member Legislative Council named for seven years by the Governor General with the advice of the Cabinet; and the eighty-member House of Representatives, popularly elected for three years. The House elected on Nov. 30, 1949, had 46 National-party members and 34 Labour-party members. Executive power is vested in the Cabinet chosen from the members of the majority party in the House and headed by the Prime Minister.

Military service was voluntary until July 22, 1940, when compulsory service was instituted. Service outside the Dominion, hitherto voluntary, also became obligatory during World War II. At full mobilization, New Zealand had 157,000 men in the armed forces and 124,000 in the Home Guard. Almost one-third of the whole male population of military age served overseas. The peacetime force is stabilized at 11,000 men. Naval forces include 2 cruisers, 6 escort destroyers and a number of mine sweepers.

SOCIAL AND ECONOMIC CONDITIONS. State education is free and compulsory between the ages of 7 and 15. More than half the Maoris attend the regular public schools; the remainder attend missionary and native village schools. In Dec., 1947, there were 2,270 primary schools with 259,182 students and 229 secondary schools with 37,229 students. University students numbered 12,764. About 8 per cent of the national budget is expended on education.

New Zealand's advanced social security system, financed principally by a 5 per cent tax on wages, salaries and firm incomes, gives benefits for old age, sickness, unemployment, maternity and hospitalization, widows, orphans, poor families and chronic invalids. The Dominion's death rate is among the world's lowest.

Primarily a grazing country, New Zealand is one of the world's largest exporters of mutton, lamb, wool, butter and cheese. In 1949, livestock included 32,844,918 sheep, 4,722,836 cattle and 544,841 hogs. Wool production for 1948-49 was 163,800 long tons (greasy). Scientific dairy management is well advanced. In 1949, New Zealand had 20,128,199 acres under cultivation, 90 per cent in sown grasses. Outside of grass, the chief crop is wheat—5,958,026 bushels in 1948-49. Other crops are oats, barley, potatoes, onions, tobacco, fruits and vegetables. Butter production in 1948-49 was 165,300 long tons; cheese, 99,400 tons; and meat (1947-48), 544,780 tons. Gross agricultural income in 1948-49 was £NZ148,700,000.

In 1947-48 there were 7,966 factories with 140,267 workers and output valued at £NZ272,155,000. The chief industries are freezing of meat and making of butter, cheese and condensed milk. Others of major importance are electricity generation, saw milling and clothing manufacture.

Trade statistics for three years (in millions of New Zealand pounds) are as follows:

	1938	1947	1948
Exports	57.1	129.4	147.8
Imports	55.5	128.7	128.2

In 1948, New Zealand's leading customers, by value, were Britain, 73.0 per cent; France, 5.6 per cent; and the U. S., 4.5 per cent. The chief suppliers were Britain, 52.3 per cent; Australia, 11.1 per cent; and the U. S., 10.8 per cent. Leading exports were wool, 30.5 per cent; butter, 22.8 per cent; and frozen meat, 19.3 per cent.

The merchant marine on Dec. 31, 1949, had 482 vessels of 205,863 gross tons. Government-owned railway mileage in 1948-49 was 3,526, and the mileage of roads in 1948 was 76,401.

Recent government financial data are as follows (in millions of New Zealand pounds):

	1947-48	1948-49	1949-50
Revenue	117.1	121.5	125.0
Expenditure	115.3	118.9	120.7

The public debt on March 31, 1949, was £NZ614,985,632, exclusive of £26,191,109, on which interest payments had been suspended since 1931 by agreement with the British government.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. New Zealand's two main components are North Island and South Island, separated by Cook Strait, which varies from sixteen to 190 miles in width. North Island (44,281 sq. mi.) is 515 miles long and volcanic in its south central part. It contains many hot springs and beautiful geysers. In the southern part of North Island is Lake Taupo (238 sq. mi.), in the center of a pumice-covered plateau.

South Island (58,093 sq. mi.) has the Southern Alps along its west coast, with Mt. Cook (12,349 feet) the highest point in New Zealand.

Principal minerals are coal (1949: 2,813,275 long tons), gold (1948: 93,903 ounces) and silver (1948: 232,563 ounces). Other minerals of importance include tungsten, pumice, silica sand, asbestos, scheelite, iron ore and phosphate. About 20 per cent of the total area is forested; 428,115,000 board feet of lumber were cut in 1947-48.

Flounder, snapper and tarakihi account for 75 per cent of New Zealand's fishery industry. There also are extensive oyster beds. The once important whaling industry declined sharply with development of pelagic whaling.

Numerous rushing streams give New Zealand a great volume of hydroelectric power. South Island has available about 4,000,000 horsepower, and North Island 800,000. About 95 per cent of the population has access to power.

The ocean tempers New Zealand's climate, which otherwise might have great variation. The range of mean temperatures is small (at Auckland, 66.3° in January, 51.2° in July; at Wellington, 60.9° in January, 47.2° in July). Rainfall is moderate except on the western slope of the Southern Alps; it averages 45.3 inches annually at Auckland and 47.5 inches at Wellington and is heaviest in winter.

DEPENDENCIES. The Auckland Islands (234 sq. mi.) and Campbell Island (44 sq. mi.) are the principal outlying islands, which have a total area of 307 square miles. They are included within the geographical boundaries of New Zealand as proclaimed in 1847. The Auckland Islands and Campbell are uninhabited. Six hundred miles north of the Aucklands are the volcanic Kermadec Islands (13 sq. mi.), annexed in 1887.

In Polynesia a number of uninhabited islands were brought under New Zealand's control in 1901. Rarotonga and Mangaia in the Cook group total 84 square miles. Niue (or Savage Island) (115 sq. mi.) is the largest island outside the Cook group. New Zealand also administers the Ross Dependency, an antarctic region claimed by Great Britain in 1923, and the Union (or Tokelau) Islands, transferred in 1925 from the Gilbert and Ellice Islands colony.

WESTERN SAMOA—Status: U. N. trust territory.

Administrator: F. W. Voelcker.

Capital: Apia (population 10,000).

Foreign trade (1949): exports, £1,344,758; imports, £881,584. Chief export: copra.

Principal products: copra, cacao, bananas, tropical fruits, rubber.

The former German Samoan Islands were occupied by New Zealand troops in the opening weeks of World War I and were mandated to New Zealand by the League of Nations in 1920 as the Territory of Western Samoa. They came under U. N. trusteeship in 1947, with New Zealand continuing as the administering authority. The administrator is assisted by a legislature with a Samoan majority and a consultative Native Council. There are 9 islands, of which the largest and most populous are Savai (703 sq. mi.) and Upolu (430 sq. mi.). They are largely mountainous but fertile. The inhabitants are Polynesian Christians.

Pacific Islands

High Commissioner in Western Pacific: Sir Leslie Brian Freeston.

Island groups in the Pacific administered by the British High Commissioner in the Western Pacific include (1) Gilbert and Ellice Islands, (2) British Solomon Islands, (3) Tonga, (4) Pitcairn Island, and (5) New Hebrides Condominium (see French Overseas Territories). The High Commissioner has headquarters at Suva, Fiji.

GILBERT AND ELLICE ISLANDS—Status: Colony.

The islands in these groups (including the Gilbert group; the Ellice group; Ocean Island [the seat of administration], Fanning, Washington and Christmas Islands; and the Phoenix group) were proclaimed a British protectorate in 1892 and annexed as a colony in 1915. The most important product is high-grade phosphate, produced on Ocean Island.

Ownership of Canton and Enderbury islands in the Phoenix group was long in dispute between Great Britain and the United States until 1939, when an agreement for "use in common" was reached by the two governments. Several of the Gilbert islands were occupied by Japanese forces in World War II, and Tarawa was the scene of one of the fiercest battles in U. S. Marine Corps history in Nov., 1943, when it was retaken from the Japanese.

SOLOMON ISLANDS—Status: Protectorate.

This British protectorate, lying east of New Guinea, includes the islands of Guadalcanal, Malaita, San Cristobal, New Georgia, Santa Isabel, Choiseul and numerous smaller islands. Bougainville, one

of the group, is under Australian mandate. The islands, which came under British protection late in the 19th century, were the scene of several important U. S. naval and military victories during World War II. There are no native states, and administration is carried on by a Resident Commissioner assisted by a nominated Advisory Council. The most important products are copra, coconuts and rubber.

TONGA (FRIENDLY ISLANDS)—Status: Protected state.

Foreign trade (1949): exports, £810,927; imports, £583,523. Chief export: copra.

This native Polynesian kingdom in the Pacific came under British protection through the Anglo-German agreement of November 14, 1899. The native queen is advised by a British Agent; the 21-member native Legislative Council is partly elected and partly nominated. The only important products are copra and bananas.

PITCAIRN ISLAND—Status: Colony.

Located in the South Pacific, about midway between Australia and South America, Pitcairn has an area of 2 square miles. It was settled in 1790 by British mutineers from the ship "Bounty," commanded by Capt. Bligh. Overpopulation forced removal of the settlement to Norfolk Island in 1856, but about 40 soon returned. The island is governed by an elected council headed by a chief magistrate. The population in 1948 was 125.

Bulgaria (Republic)

(Blgariya)

Area: 42,741 square miles (including Southern Dobruja).

Population (est. 1948): 7,100,000 (1934: Bulgarian, 86.7%; Turkish, 10.1%; Gypsy, 1.3%; others, 1.9%).

Density per square mile: 166.1.

Chairman of Presidium: Mincho Neychev.

Premier: Vulko Cherenkov.

Principal cities (census 1946): Sofia, 434,888 (capital, railroad center); Philippopolis (Plovdiv), 125,440 (commercial center); Varna, 77,792 (Black Sea port); Ruschuk, 53,420 (chief Danube port); Burgas, 43,684 (Black Sea port).

Monetary unit: Lev.

Languages: Bulgarian, Turkish.

Religions: Greek Orthodox, 84.4%; Mohammedan, 13.5%; Jewish, .8%; Roman Catholic, .8%; others, .5%.

HISTORY. Bulgaria, with a strife-ridden political past, is an agrarian country about the size of Virginia. It sided timidly with Germany in World Wars I and II, hoping to win territory. It lost in both wars.

The first Bulgarians, a tribe of wild horsemen akin to the Huns, crossed the Danube from the north in A.D. 679, and took the province of Moesia from the

Roman Empire. They adopted a Slav dialect and Slavic customs and twice conquered most of the Balkan peninsula between 893 and 1280. After the Serbs subjected their kingdom in 1330, the Bulgars gradually fell prey to the Turks, and from 1396 to 1878, Bulgaria was a Turkish province. In 1878, after the Turks had ruthlessly suppressed a Bulgar revolt, Russia forced Turkey to give the country its independence; but the European powers, fearing that Bulgaria might become a Russian dependency, intervened. By the Treaty of Berlin (July, 1878), Bulgaria became autonomous under Turkish sovereignty, with the province of Eastern Rumelia under a Christian governor.

In 1887 Prince Ferdinand of Saxe-Coburg-Gotha was elected ruler; on Oct. 5, 1908, he declared Bulgaria (and Rumelia) an independent kingdom and was proclaimed Tsar.

In the First Balkan War (1912-13), Bulgaria joined its neighbor states and defeated Turkey; then it bickered with Serbia and Greece over division of Macedonia and was defeated by them in the Second Balkan War, which lasted one month—June-July, 1913.

Still coveting Macedonia, Bulgaria joined Germany in World War I and lost. On Oct. 3, 1918, Tsar Ferdinand abdicated in favor of his son, who became Tsar Boris III. The Treaty of Neuilly the next year disarmed Bulgaria, reduced it to its 1878 size, and levied a heavy indemnity. Internal disorder, underground intrigue and Agrarian-Communist agitation marked the next fifteen years.

Boris assumed dictatorial powers in 1934-35. When Hitler awarded his nation Southern Dobruja, taken from Rumania in 1940, the weak but land-hungry Boris joined the Nazis in war the next year and occupied parts of Yugoslavia and Greece. Later, with the fortunes of war swinging inexorably against them, the Germans tried to force Boris to send his troops against the Russians. Boris resisted and died under mysterious circumstances on Aug. 28, 1943.

Simeon II, infant son of Boris, became nominal ruler under a regency. Three days after Russia declared war on Bulgaria on Sept. 5, 1944, Bulgaria declared war on Germany. Russian troops streamed in the next day, and under an informal armistice a coalition "Fatherland Front" cabinet was set up under Kimon Georgiev.

The Fatherland Front regime represented the Communist, Zveno, Agrarian and Social Democratic parties, but real power was in the hands of the Communists, who had active Soviet support and were ably led by Georgi Dimitrov, veteran party leader and former secretary-general of the Comintern.

This Government initiated extensive social and economic reforms, instituted a

ruthless purge of war criminals and suppressed all political groups which failed to subscribe to its policies. The elections of Nov. 18, 1945, and Oct. 27, 1946, were conducted in typical Communist manner, with the Fatherland Front securing overwhelming majorities, according to official figures.

After the plebiscite of Sept. 8, 1946, which resulted in overthrow of the monarchy, and the Oct. 27 elections, the Communists quickly moved to take over the Government officially and to reduce the political opposition to complete impotence. Dimitrov replaced Georgiev as Premier on Nov. 22, 1946.

During the next years, Bulgaria continued to strengthen its ties with its Balkan neighbors back of the "iron curtain." Dimitrov died July 2, 1949, while on a leave of absence in the U.S.S.R. Vassil Kolarov was elected Premier on July 20. He died on Jan. 23, 1950, and was succeeded by Vulko Cherenkov, Dimitrov's son-in-law.

The United States broke diplomatic relations with Bulgaria on Feb. 21, 1950.

GOVERNMENT. The constitution of Dec. 4, 1947, modeled after that of the Soviet Union, provides that the unicameral National Assembly is "the supreme organ of the State." The Assembly elects a 15-member presidium, the president of which is the nominal chief of state. Governmental administration is carried on by the Premier and his Cabinet, who are responsible to the Assembly. On Feb. 4, 1948, the Communist-dominated Fatherland Front was declared the only official party.

PEACE TREATY OF 1947. Under the treaty which took effect Sept. 15, 1947, Bulgaria's boundaries are those which existed Jan. 1, 1941, thus including Southern Dobruja. Bulgaria was to pay reparations in the amount of \$45,000,000 to Greece and \$25,000,000 to Yugoslavia and was to make compensation for damage to Allied property in Bulgaria at the rate of 75 per cent of the cost of replacement.

DEFENSE. The 1947 treaty fixed the strength of the armed forces as follows: army 55,000; anti-aircraft artillery 1,800; navy 3,500; and air force 5,200 men and 90 aircraft, none of them bombers. The army was purged of all anti-Communist officers late in 1946 and has been reorganized along Soviet lines.

SOCIAL AND ECONOMIC CONDITIONS. Though elementary education is compulsory and free between 7 and 14, the rate of illiteracy is relatively high. Schools in 1948 included 9,238 primary schools and 465 secondary and technical schools. The University of Sofia and 8 other universities and colleges had an estimated enrollment of 50,000.

Most of the population is Greek Orthodox. Clergy of all faiths are paid by the state. The national language, Bulgarian, is closely related to Russian; both employ the Cyrillic alphabet.

Bulgaria is predominantly agrarian, with 80 per cent of the population engaged in agriculture. Because of the mountainous character of the country, however, only about 43 per cent of the land is tilled or used for pasture. Most landholdings are small, and primitive methods of cultivation predominate. More than half the cultivated area is devoted to cereals, including wheat (production in 1948: 1,470,000 metric tons), corn, barley, oats and rye. Other crops are tobacco (1948: 68,000 tons), alfalfa, cotton, flax, potatoes and sugar. There are extensive vineyards in the southern valleys. Production of silkworm cocoons is highly developed. In 1947 Bulgaria had 549,000 horses, 1,711,000 cattle, 8,784,000 sheep, 1,069,000 goats, and 1,028,000 hogs.

Industries of Bulgaria are of minor importance and with three exceptions—preparation of tobacco leaf, distillation of attar of roses, and flour milling—are confined to domestic markets. All industries of any importance have been nationalized.

Foreign trade necessarily consists of the exchange of agricultural products for cheap manufactures. Statistics, in billions of leva, are as follows:

	1939	1946	1947
Exports	6.07	14.94	24.53
Imports	5.20	17.51	21.42

Leading customers, by value (1947), were U.S.S.R., 52.0 per cent and Czechoslovakia, 19.0 per cent. Leading export was tobacco, 80.0 per cent. Leading sources of imports were U.S.S.R., 61.0 per cent and Czechoslovakia, 16.0 per cent.

Although the Danube is navigable along the northern border, only a comparatively small percentage of prewar Danube ship tonnage was Bulgarian. Railroad mileage, all nationalized, totaled 2,072 in 1946; highway mileage was 13,870 in 1945.

Government revenues and expenditures for 1950 were estimated at 207,300,000,000 leva and 198,000,000,000 leva, respectively.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Two mountain ranges and two great valleys mark Bulgaria's topography. The Balkan belt crosses the center of the country, almost due east-west, rising to a height of 7,800 feet. The Rhodope range breaks off from the Balkans in the west, curves and then straightens out to run nearly parallel along the southern border. Between the two ranges is the valley of the Maritsa, Bulgaria's principal river. Between the Balkan range and the Danube, which forms most of the northern boundary with Rumania, is the Danubian table-

land, traversed by several short rivers. Southern Dobruja, a fertile region of 2,900 square miles below the Danube delta, is an area of low hills, fens and sandy steppes.

Soft coal is Bulgaria's principal mineral; production in 1947 was estimated at 4,044,000 metric tons. Other mineral products include aluminum and rock salt; uranium deposits have been reported.

About 30 per cent of the country is forested, but a large part is unproductive scrub, and most of the valuable woods are virtually inaccessible. Wood imports usually exceed exports.

Bulgaria's climate is characterized by cold winters and warm summers approaching the subtropical in the south. Rain and snowfall average twenty to forty inches a year. Temperatures at Sofia average 28° in January and 69° in July.

Burma (Republic)

Area: 261,749 square miles.

Population (est. 1948): 18,000,000 (1941: Burmans, 60%; Shans, 7%; Chins, 2%; Kachins, 1%; Indians, 6%; Chinese, 1%; Indo-Burmans, 1%; others, 22%).

Density per square mile: 68.8.

President: Sao Shwe Thaik.

Premier: Thakin Nu.

Principal cities (est. 1942): Rangoon, 501,219 (capital, chief port); Mandalay, 150,000 (river port, upper Burma); Moulmein, 70,000 (seaport); (est. 1941) Bassein, 50,000 (river port).

Monetary unit: Burmese rupee.

Languages: Burmese (70%), English.

Religions: Buddhist, 90%; Mohammedan, 3%; Hindu, 3%; Christian, 2%; others, 2%.

HISTORY. Lying on the eastern side of the Bay of Bengal between India, China and Siam, the Union of Burma came into existence as an independent state on Jan. 4, 1948. Since that time the new republic has held its own with difficulty against attacks on the one hand by Communist rebels seeking its overthrow and on the other by Karen insurgents seeking wider territorial autonomy.

In 1612 the British East India Company sent agents to Burma, and in the 17th and 18th centuries the Burmese stoutly resisted the efforts of British, Dutch and Portuguese traders to establish posts on the Bay of Bengal. Actual British rule dated from 1826, and in 1886 British troops forced the annexation of all Burma to India. On April 1, 1937, the British separated Burma from India and set it up as a Crown colony with its own legislature and a British governor.

For hundreds of years a battlefield of petty princes, Burma became a key battleground in World War II largely because the 800-mile Burma Road was the Allies' vital supply line to China. The Japanese in-

vaded the country in Dec., 1941, and by May, 1942, had occupied most of it, cutting the road. In Aug., 1942, the Japanese set up a puppet government under Dr. Ba Maw.

After one of the most difficult campaigns of the war, Allied forces liberated most of Burma prior to the Japanese surrender on Aug. 14, 1945. Civil government was resumed in Oct., 1945, but the native nationalist feeling continued strong.

An agreement with Britain signed on Jan. 27, 1947, gave the Burmese an opportunity to determine their future form of government. The leftist Anti-Fascist People's Freedom League secured a majority in the Constituent Assembly elections held April 9, 1947, and the Assembly voted on June 17, 1947, to declare Burma a republic. The interim Premier, U Aung San, was assassinated July 19, 1947, and was succeeded by Thakin Nu.

The Burma Independence Act, enacted Dec. 10, 1947, provided for the transfer of power in accordance with the provisions of the earlier Anglo-Burmese treaty signed at London Oct. 17, 1947. On Jan. 4, 1948, the Burmese formally gained full political control.

GOVERNMENT. The constitution adopted by the Constituent Assembly Sept. 24, 1947, provides for a government headed by the president, who is elected by the two houses of parliament—the Chamber of Deputies and the Chamber of Nationalities—meeting in joint session. The president appoints the premier on nomination of the Chamber of Deputies; the cabinet must enjoy the confidence of the Chamber of Deputies. Four frontier areas—the Shan, Kachin and Karen states, and the Chin special division—are constituent parts of the Union but enjoy some autonomy.

The constitution contemplates a form of state socialism, with the operation of all public utilities and the exploitation of all natural resources to come eventually under state control.

SOCIAL AND ECONOMIC CONDITIONS. Burma had 2,781 state and recognized schools in 1945-46, with enrollment of 229,317. In addition, almost every hamlet has a Buddhist school where tuition is free. Because of the many monastic schools, the percentage of wholly illiterate men is small. There is a university at Rangoon, with 2,742 students in 1948.

The natives in general are Mongolian; the Burmese are the most advanced. British Indians, settled in the delta region, supply most of the coolie labor, while the Chinese constitute the artisan and merchant class. Buddhism, the national religion, profoundly affects the national character; every village has its temple.

Burma is essentially agricultural, with crop growing concentrated in the delta and river valleys. It is a leading producer of rice, the staple food, which occupies two-thirds of the cultivated area. Output in 1948-49 was 5,317,800 long tons. Crops grown in the dry zone in upper Burma include millet, cotton, peanuts and sesame. Other crops include tobacco, fruit, vegetables and cereals. About 1½ million acres are under irrigation. The number of rubber plantations has increased. The principal domestic animals are water buffalo (716,867 in 1948), used as a beast of burden in the delta, and small humped oxen, which predominate in other areas. Cattle, including oxen, totaled 4,479,968 in 1948.

Leading industries include silk weaving and dyeing, rice husking, oil refining and wood carving.

The whole Burmese economy was disrupted during the Japanese occupation, and rehabilitation has made slow progress, hampered by lack of heavy material, consumer's goods and transport, and in some areas by extreme lawlessness and rebellion.

Exports in 1948-49 totaled 733,297,000 Burmese rupees, and imports, Rs. 373,321,000. Chief exports were rice (82%), teak and other hardwoods (6%) and metals and ores (3%). Leading customers were India (38%), Ceylon (19%) and British possessions (13%).

Revenue in 1949-50 was estimated at 574,000,000 Burmese rupees and expenditure at Rs.597,000,000, of which 39 per cent was earmarked for military and police purposes.

The principal commercial arteries are the Irrawaddy, navigable for 900 miles to Bhamo, and its tributaries. Regular steamer service is maintained to Bhamo. Railways designed to supplement river transport totaled 1,786 miles in 1948, all state-owned. There are no rail connections with India or any other country. The length of roads was 12,472 miles in 1949. The Burma Road connects Lashio, a rail terminus in northern Burma, with Kunming, China.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Slightly smaller than Texas, Burma is divided into three natural regions: the Arakan Yoma, a long, narrow mountain range forming the barrier between Burma and India; the Shan Plateau in the east, extending southward into Tenasserim; and the Central Basin running down to the flat, fertile delta of the Irrawaddy in the south. This delta contains a network of inter-communicating canals and nine principal mouths.

Mineral resources are considerable but, in many cases, undeveloped. Production by the Burmah Oil Company, Ltd., in 1939,

was 7,396,000 barrels, but in 1948 it was only about 300,000 barrels.

Other minerals include lead, silver, tin, zinc, nickel, cobalt, copper, gold, iron ore, molybdenum, coal, uranium (reported), rubies, sapphires and jade. Postwar recovery has been slow.

More than half of Burma is forested, with government reserves totaling 31,637 square miles. Teak, valuable for naval construction, is the main timber product. Its cutting is strictly controlled. Natural-rubber exports were estimated at 9,000 long tons in 1948. Fisheries are exploited both along the coast and inland.

Burma forms part of the Asiatic monsoon region, but its climate is modified by the topography. There are three seasons: (1) cool and rainless (November through February); (2) hot and rainless (March through May) and (3) rainy (June through October). At Rangoon the annual temperature range is only 10°; at Mandalay, about 20°. Annual rainfall at Rangoon is about 100 inches; at Mandalay, 33.4 inches.

Chile (Republic)

(República de Chile)

Area: 286,323 square miles.

Population (est. Dec. 31, 1949): 5,764,650 (white, 30%; mestizo, 65%; Indian, 5%).

Density per square mile: 20.1.

President: Gabriel González Videla.

Principal cities (est. 1949): Santiago, 1,161,633 (capital); Valparaíso, 182,689 (port); Viña del Mar, 98,156 (resort center); Concepción, 87,620 (farming center); Talca, 42,994 (farming center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Chile has had a relatively tranquil history amid South America's long record of revolution and strife, but it has suffered repeated labor disturbances in recent years.

Europeans first arrived in 1536, when Diego de Almagro, an associate of Pizarro, led an unsuccessful invasion from Peru. Five years later another Spaniard, Pedro de Valdivia, founded Santiago. On Sept. 18, 1810, Chile rebelled against Spanish rule, but independence was not won completely until 1818, when Bernardo O'Higgins and José de San Martín finally crushed the Spanish armies.

Chile, which has never lost a war, fought with Bolivia and Peru in 1879-83 and won the province of Antofagasta, Bolivia's only outlet to the Pacific, as well as extensive areas from Peru. In World War I, Chile was neutral. The overthrow in 1931 of Colonel Carlos Ibáñez, who had seized power in 1927, was followed by a brief chaotic period in which seven presidents tumbled in and

out of office, but Dr. Arturo Alessandri (1932-38) did much to restore Chile's political and economic order.

Pedro Aguirre Cerda, victor in the 1938 elections, initiated an extensive socialist program before his death on Nov. 25, 1941. The term of Juan Antonio Ríos, elected as Radical candidate of the Popular Front in 1942, was marked by political dissension and labor difficulties. Under both external and internal pressure, the latter notably from its strong Communist party, Chile finally broke relations with the Axis on Jan. 20, 1943, but did not declare war on Japan until Feb. 14, 1945.

Ríos died June 27, 1946. Following a special election, Gabriel González Videla, candidate of a leftist-center coalition, became president on Nov. 3, 1946. His administration was plagued by recurrent labor disputes, some of which were said to be Communist-inspired. He pursued a strong anti-Communist policy, and in the March, 1949 elections, the Government coalition secured majorities in both chambers.

GOVERNMENT AND DEFENSE. The nation elects a president every six years, a Senate of forty-five members every eight years (one half renewable every four years) and a Chamber of Deputies of 147 members every four years. The president is assisted by a cabinet responsible to him but subject to impeachment by Congress, which also may override a presidential veto by two-thirds vote. All literate male citizens over twenty-one may vote in elections.

Military service is compulsory, beginning at twenty with an initial training period of nine months, after which a civilian is on reserve until the age of forty-five. In 1948 the army was unofficially estimated at 25,000. The navy, normally 12,000 men strong, had in 1950 one old battleship of 28,000 tons, six destroyers, seven submarines and two coast defense craft. The air force, with 200 planes and 3,000 men in 1940, expanded during World War II.

SOCIAL AND ECONOMIC CONDITIONS. Education, free and compulsory between 7 and 15, is directed by the central government. In 1943, illiteracy was estimated at 24 per cent, third lowest in Latin America. School enrollment in 1947 was about 600,000. There are five universities, including the State University of Chile. About 20 per cent of the budget is devoted to education.

The base of the white population is Spanish, although there are some German, English, Irish and Scotch. Roman Catholicism is the dominant religion, but church and state were separated in 1925.

Chilean agriculture is mostly confined to the temperate central valley, similar to that of California. The available productive land is extremely limited, and most of it must be irrigated. Wheat (1949: 1,113,-

484 metric tons) is the leading crop, followed by potatoes, oats, barley, corn, string beans and fruits. Grapes, next to wheat in acreage, produced 83,000,000 gallons of wine in 1949. Feudal-type estates, averaging 2,500 acres, predominate. Cattle in 1949 totaled 2,344,188 and sheep (1948) 6,435,000. Wool production in 1948 was 16,000 metric tons.

The livestock industry does not supply local needs, but wool is used in Chilean textile mills, and wool and hides are exported.

Foreign trade (in millions of U. S. dollars):

	1947	1948	1949
Exports	277	328	299
Imports	266	269	303

In 1949 the leading customers were the U. S. (49 per cent), Britain (8 per cent) and Germany (8 per cent); leading suppliers, the U. S. (54 per cent), Argentina (14 per cent) and Peru (11 per cent). Chief exports were copper (50 per cent) and nitrate (21 per cent). Leading imports were sugar, petroleum and products, and cotton textiles.

Although Chile dreams of great industrial development and has all the necessary raw materials except high-grade coal and tin, progress continues slowly. Except for mineral processing, most manufacturing is of low-priced consumer's goods, particularly textiles. A steel industry was established in 1946.

Highway mileage totaled approximately 31,250 in 1947, about a third improved. Rail mileage was 5,434, partly electrified. Civil aviation is highly developed in the interior, and several international lines serve the country. The merchant marine had 92 vessels (100 tons and over) aggregating 188,168 gross tons in 1948.

The 1950 budget balanced government revenue and expenditure at 5,650,000,000 pesos with the aid of a \$25,000,000 loan from the U. S. Export-Import Bank. The funded foreign debt totaled \$242,300,000 on Dec. 31, 1948; the direct debt on Dec. 31, 1947, was 7,661,000,000 pesos plus guarantees of 1,767,000,000 pesos.

The basis of the country's economy is its mineral resources in the northern desert provinces of Atacama, Antofagasta and Tarapacá, where the only natural nitrate in the world is found. Some 60 per cent of the world's iodine is obtained as a by-product of nitrate processing. Chile's world monopoly in nitrate, however, declined in importance with development of the synthetic product.

The world's largest copper reserve, estimated at 134 billion pounds, is in Chile, and also more than 900 million tons of high grade iron ore. The reserve of Chilean coal, noted for quantity rather than quality, exceeds two billion tons.

Mineral production in 1949 was as follows: coal, 2,078,690 metric tons; copper, 371,094 tons; iron ore, 2,742,914 tons; nitrate of soda, 1,769,900 tons; gold, 178,131 ounces; silver, 759,655 ounces. Mercury, manganese ore, cobalt, zinc, tungsten and molybdenum also are produced, and deposits of uranium have been reported. Oil was first produced in Tierra del Fuego in Dec., 1945.

Forests, estimated to cover 35 million acres in the southern provinces, yield a variety of commercial wood, including conifer, laurel and magnolia. Fishery products include cod, eel, oysters, sawfish, sardines, tuna and whale-oil.

TOPOGRAPHY AND CLIMATE. A narrow, mountainous land, Chile is 2,661 miles in length, and varies from 46 to 250 miles in width; one-third of its area is covered by the towering ranges of the Andes. In the north is the mineral-rich Atacama Desert, between the coast mountains and the Andes. In the center is a 700-mile-long valley, thickly populated, between the Andes and the coastal plateau. In the south, the Andes border on the ocean.

At the southern tip of Chile's mainland is Punta Arenas, the southernmost city in the world, and beyond that lies the Strait of Magellan and Tierra del Fuego, an island divided between Chile and Argentina. The Juan Fernández Islands, in the South Pacific about 400 miles west of the mainland, and Easter Island, about 2,000 miles west, are Chilean possessions.

Chile's short rivers are useful only for irrigation and as sources of electric power. The country has many ports but few good harbors, and most of the tonnage must be handled by lighters.

In Chile's extreme north the days are hot, the nights warm on the coast and cool in the interior. Central Chile's climate is comparable to that of southern California, and southward in the lake regions the climate is similar to that of the U. S. Pacific Northwest. In the extreme south, fogs and storms keep the mean temperature low. Santiago has extreme recorded temperature ranges of 25° and 96°. Snow is rare.

China (Republic) (Chung-Hua Min-Kuo)

Area: 3,858,900 square miles.*

Population (est. 1948): 463,493,418.*

Density per square mile: 120.1.*

President, Nationalist China: Generalissimo Chiang Kai-shek.

Premier: Chen Cheng.

Chairman of People's Council: Mao Tse-tung.

Premier: Chou En-lai.

Principal cities (est. 1948): Shanghai, 4,630,385 (chief port, industrial and finan-

cial center); Tientsin, 1,772,840 (commercial center); Peiping (Peking), 1,721,546 (capital, Communist China); Canton, 1,128,165 (southern commercial center); Nanking, 1,113,972 (former Nationalist capital); Mukden, 1,021,057 (capital of former Manchu dynasty); Chungking, 985,673 (river port, trade center).

Monetary unit: Chinese dollar.

Language: Chinese.

Religions: Confucianism, Buddhism, Taoism, Mohammedanism, Christianity.

* Including Province of Formosa (Taiwan), Manchuria and Tibet; excluding Outer Mongolia.

HISTORY. China, second in size and first in population among the countries of the world, is ancient and wise, but backward. Its recorded history is among the world's oldest. By 2000 B.C., Chinese were living in the Hwang Ho basin, and they had achieved an advanced stage of civilization by 1200 B.C. The great philosophers, Lao-tse, Confucius, Mo Ti and Mencius lived during the Chou dynasty (about 1122 to 249 B.C.). The warring feudal states were first united under Emperor Ch'in Shih Huang Ti, during whose reign (246-210 B.C.) work was begun on the Great Wall. Under the Han dynasty (206 B.C. to A.D. 220) China prospered and opened trade with the West.

The T'ang dynasty (618-907) has often been called the golden age of Chinese history. Painting, sculpture and poetry flourished under royal patronage, and printing made its earliest known appearance.

The Mings, last of the native rulers (1368-1644), overthrew the Mongol or Yuan dynasty (1280-1368) established by Kublai Khan, whose dominions extended into eastern Europe. The weakening Mings in turn were overthrown in 1644 by invaders from the north, the Manchus.

The Chinese closely restricted foreign activities, and by the end of the 18th century only Canton (and the Portuguese port of Macao) were open to European merchants. Following the Anglo-Chinese War of 1839-42, however, several treaty ports were opened and Hong Kong was ceded to Britain. Treaties signed after further hostilities (1856-60) weakened Chinese sovereignty and removed foreigners from Chinese jurisdiction. The disastrous Chinese-Japanese War of 1894-95 was followed by a scramble for Chinese leases and concessions by European powers which resulted in the nationalist Boxer Rebellion (1900), suppressed by an international force.

The death of the Empress Dowager Tzu Hsi in 1908 and the accession of the infant emperor Hsian T'ung (Pu-Yi) were followed by a nation-wide rebellion led by Dr. Sun Yat-sen, who became first President of the Provisional Chinese Republic in 1911. The Manchus abdicated on Feb. 12, 1912. Dr. Sun resigned in favor of Yuan Shih-k'ai, who suppressed the republicans

but was forced by a serious rising in 1915-16 to abandon his intention of declaring himself Emperor. Yuan's death in June, 1916, was followed by years of civil war between rival militarists and Dr. Sun's republicans. The death in 1925 of Dr. Sun, who had controlled only the Canton area in opposition to the recognized regime, was followed by a revival of the Kuomintang party, which practically deified him. Nationalist forces, led by Gen. Chiang Kai-shek and advised originally by Communist experts, soon occupied most of China, setting up a Kuomintang regime in 1928. Internal strife continued, however, and Chiang broke with the Communists.

An alleged explosion on the South Manchurian Railway on Sept. 18, 1931, brought invasion of Manchuria by Japanese forces, who installed the last Manchu emperor, Henry Pu-Yi, as nominal ruler of the puppet state of "Manchukuo." Japanese efforts to take China's northern provinces in July, 1937, were resisted by Chiang Kai-shek, who meanwhile had succeeded in uniting most of China behind him. Within two years, however, Japan seized most of the ports and railways. The Kuomintang government retreated first to Hankow and then to Chungking, while in "Occupied China" the Japanese set up a puppet government at Nanking headed by Wang Ching-wei. In 1943 Chiang became political as well as military leader of "Free China."

When the Japanese surrendered in 1945, a treaty was signed with the Soviet Union providing for Soviet withdrawal from Manchuria, joint Chinese-Soviet control of Manchurian railways for 30 years, a joint Chinese-Soviet naval base at Port Arthur and a free port at Dairen.

The surrender of Japan also touched off a race between Nationalist and Communist forces for control of China. Agreement was reached for the establishment of a Political Consultative Council representing all groups on Oct. 10, 1945, but fighting broke out again early in 1946 with the Communists controlling northern and central Manchuria and northern China.

The civil war continued without decisive results until late 1948, when the Communists loosed new drives, which by the end of 1949 had brought all China except the island of Formosa under their control. Barricaded on Formosa, the Nationalist regime was weakened in 1950 by internal dissension and had little means at its disposal to make any effective counter-attack upon the mainland. The U. S., however, after the outbreak of the Korean war in June, 1950, promised naval and air aid to repel any invasion of Formosa. Chiang, who had stepped down from the presidency on Jan. 21, 1949, reassumed that post on Feb. 28, 1950, and on Mar. 8 appointed Chen Cheng premier.

The Communists meanwhile set up in

September, 1949, a soviet-type government. After prolonged negotiations, the People's government and the Soviet Union signed a 30-year treaty of friendship and mutual aid on Feb. 14, 1950; its published terms provided for a \$300,000,000 Soviet credit and for the return of the Changchun railroad to China and the eventual return of Port Arthur and Dairen.

GOVERNMENT. Under the Nationalist constitution of 1947, the highest state organ is the National Assembly, which meets once each three years and is the "sovereign organ of the people." Its members are elected for 6-year terms on the basis of territorial and professional representation. The Assembly elects the President and Vice President of the Republic for 6-year terms. The organs of government are five in number—the Executive Yüan (cabinet), whose members, headed by the Premier, are appointed by the President with the concurrence of the Legislative Yüan; the Legislative Yüan, which exercises legislative functions when the Assembly is not in session and has ultimate control over the cabinet; the Control Yüan, broadly corresponding to an "upper house," which has general supervisory and censorial functions; the Judicial Yüan, the highest court of justice; and the Examination Yüan, which controls civil service.

The constitution of the People's republic was approved by a political consultative conference on Sept. 27, 1949, and was proclaimed on Oct. 1. It established as the highest organ of the state the people's government council, which is headed by a chairman and has legislative functions. The government council established as the highest executive organ a state administrative council (cabinet) headed by the premier. Effective control is exercised throughout by the central committee of the Chinese Communist party.

DEFENSE. Military service is compulsory in Nationalist China; the initial training period is one or two years. The fighting strength of the army in 1950 was only about 300,000 men. The air force had about 200 planes and the navy, some 100 small vessels. About 80 per cent of the budget was tabbed for military purposes.

Supreme control of the Communist armed forces is vested in the people's revolutionary military council. Communist forces in 1950 numbered upwards of 4,500,000. Air and naval strengths were negligible.

EDUCATION. In 1948, about 200 institutions of higher learning had an enrollment of 148,000; in 1947 there were 790,617 primary schools with 23,813,705 pupils and 5,892 secondary schools with 1,878,523 students. Education is nominally compulsory between the ages of 6 and 12. The mass education and literacy movement has been

accompanied by the replacement of the old classical or "dead" Chinese language with the popular vernacular (Pai-hua) of the Mandarin dialect, employing perhaps 1,000 of the most essential of the many thousands of Chinese ideographs.

POPULATION AND RELIGION. Estimates of China's population vary and are only calculated guesses, since no national census has ever been taken. The population is quite unevenly distributed, with most of it in the following five areas: the central portion of the northern plain (Shantung); the Yangtze Kiang delta; a coastal belt extending southward from the Yangtze delta to the Canton delta; the Hupeh basin centered around Hankow; and the isolated basin of Szechwan, far to the west. Most Chinese who are not Christians or Moslems practice one of the three native religions—Confucianism, Buddhism or Taoism. Almost 10 per cent of the population is estimated to be Moslem; there are also many Roman Catholics and Protestants.

AGRICULTURE. In China, nearly 80 per cent of the population depend on the land for livelihood. Subsistence crops are necessarily emphasized, but China is still not self-sufficient in food. Cultivation is intensive, holdings are small, and irrigation is widely practiced. The three most important food crops—rice (1948: 48,184,000 metric tons), wheat (1948: 25,582,000 metric tons) and millet—occupy 70 per cent of the cultivated area. The range of crops is wide. In the north, wheat, barley, corn, sorghum, millet and other cereals, and beans and peas predominate, whereas in the south, rice, sugar and indigo are most important. The Yangtze basin, one of the most favored agricultural regions in the world, is China's premier granary. Tea, the chief beverage, is grown mainly in the central uplands, coastal ranges and Szechwan; 11,699 metric tons were exported in 1947.

Silkworm culture is practiced widely, especially in the lower Yangtze valley. Cotton, the major purely industrial crop, runs from 2,500,000 to 4,000,000 bales a year. Soybeans are of ever-increasing importance. Other crops include fibers, tobacco, vegetable oils, cane sugar and many medicinal plants and spices.

The urgent need for subsistence crops has confined grazing grounds for sheep and cattle to the dry northwest and to mountain pastures. However, such animals as goats, poultry and especially pigs are raised everywhere.

The 1949 harvest was reported to be very poor, and large areas were faced with famine in 1950.

INDUSTRY. Industrially, China is still in its infancy. Development has been mainly in the erection of textile mills, silk and flour mills, match factories, tanneries and

a few steel and cement mills. The production of consumer's goods far exceeds that of producer's goods, which must still be imported. Much of the industry which had been developed in the lower Yangtze valley and the Shanghai area was moved westward in 1938 and 1939 to escape Japanese capture, and southward in 1948 to escape Communist control.

Postwar industrial rehabilitation proceeded at a slow pace because of the high cost of labor and materials, high interest rates, power shortages and the unsettled political situation. Limited U. S. aid was received under terms of the Foreign Assistance Act of 1948, which allotted \$338,000,000 for reconstruction and relief purposes during the year 1948-49 and \$125,000,000 for military aid.

TRADE. Foreign trade statistics, in billions of Chinese dollars, are as follows:

	1946	1947	1948*
Exports	420	6,432	1,399
Imports	1,909	14,395	1,193

* Gold dollars.

In 1948 the U. S. supplied 48 per cent of China's recorded commercial imports, followed by India, 11 per cent; Britain, 8 per cent; and Japan, 1 per cent. Of the total exports, 31 per cent went to Hong Kong, 20 per cent to the U. S., 6 per cent to Japan and 4 per cent to Britain. Textiles and products accounted for 45 per cent of the domestic exports; tung oil, 9 per cent; pig bristles, 7 per cent; and eggs and tungsten ore, each 3 per cent.

COMMUNICATIONS. Exploitation of many of China's natural resources has been handicapped by the lack of internal communications. There is an extensive system of inland waterways and canals, however, and in central and south China most of the freight is carried by water.

The modern highway system now totals about 100,000 miles, but at least half of the system is in need of extensive repairs. The railway system, totaling about 18,000 miles, is concentrated in the lower Yangtze basin and in north China and Manchuria. The principal port, Shanghai, at the mouth of the Yangtze, normally accounts for about 50 per cent of the total maritime customs revenue, and is the Far East's major port.

FINANCE. Civil war threw China's finance into confusion. Complete budget figures are not available for recent years, but both the Nationalist and People's governments suffered large deficits. The Nationalist deficit was financed by the sale of gold, silver and foreign exchange; that of the People's government, to a considerable extent by note and victory-bond issues.

TOPOGRAPHY. China has about 1¼ times the area of the continental United States.

Its coast line is roughly a semi-circle, about 2,150 miles long. The greater part of the country is mountainous, and only in the lower reaches of the Hwang Ho and Yangtze Kiang are there extensive low plains. The principal mountain ranges are the Tien Shan, to the northwest; the Kunlun chain, which attains a maximum height of 23,890 feet, running south of the Takla Makan and Gobi deserts; and the Trans-Himalaya, connecting the Kunlun with the borders of China and Tibet. Manchuria is largely an undulating plain connected with the north China plain by a narrow lowland corridor. Inner Mongolia contains the relatively fertile southern and eastern portions of the Gobi. The large island of Hainan (13,500 sq. mi.) lies off the southern coast.

HYDROGRAPHY. China proper consists of three great river systems. The northern part of the country is drained by the Hwang Ho (Yellow), 2,700 miles long and mostly unnavigable. The central part is drained by the Yangtze Kiang, the fifth longest river in the world (3,100 mi.). The Si Kiang in the south is about 1,650 miles long and navigable for a considerable distance. In addition, the Amur forms part of the northeastern boundary.

MINERALS. Mineral resources are considerable. Iron ore, far less plentiful than coal, is mined principally in the lower Yangtze valley and in north China. Tin, mined in Yunnan and southwest Szechwan, has been a major mineral export. Of some rarer minerals, notably antimony and tungsten, China is normally the world's leading producer. Lead, zinc, silver, mercury and gold are also mined, and discovery of uranium has been reported. Mineral production in 1948 was estimated as follows: coal, 13,800,000 metric tons; iron ore, 158,000 tons; tin (in ore), 4,900 tons; tungsten, 9,600 tons.

FORESTS AND FISHERIES. China urgently needs reforestation. Most remaining forests are on inaccessible mountain slopes. Bamboo is cultivated in groves throughout the country south of the Tsinling mountains. Both sea and river fisheries are rich and varied, and fresh or salted fish is a staple food in many districts. The coastal fisheries of Shantung, Chekiang and Kwantung are especially valuable.

CLIMATE. There are great diversities of climate. North China has the coldest winters in the world for its latitude (23.5° average in January at Peiping). The Yangtze valley is warmer, with winter temperatures more like those of Britain, while the south has warm subtropical winters. Summer temperatures are uniformly hot throughout China (about 79° in July at Peiping and 82° at Hong Kong). South

China receives regular rainfall averaging from 40 to 60 inches annually, but in the north rainfall is irregular and not as heavy; droughts and floods are common.

Chinese Outer Territories

MANCHURIA—Status: Integral part of Republic of China.

Area: 503,143 square miles.

Population (est. 1940): 43,233,954.

Chief exports: soya beans, bean cake, coal, millet, sorghum, corn.

Agricultural crops (1948, in metric tons): soya beans, 3,200,000; wheat (1946), 393,000; rice, 460,000; millet; sorghum; maize.

Industries: iron and steel, machinery, textiles, food processing, chemicals.

Minerals: coal, iron ore, gold, lead ore, manganese ore.

Manchuria includes the three northeastern provinces of China—Fengtien, Kirin and Heilungkiang (now divided into nine provinces)—which before the Japanese invasion of 1931 were governed apart from China proper. A separate state (Manchukuo) set up under Japanese sponsorship was never recognized by China, the United States or Britain. The regime was a transparent screen for Japanese control exercised by the Kwantung army. The Japanese hold on Manchuria was broken by the Soviet invasion of August, 1945.

The decision reached at the Cairo conference (1943) that Manchuria should revert to Chinese possession was confirmed by the Chinese-Soviet treaty signed Aug. 14, 1945. Soon after the Japanese surrender, however, Chinese Communist troops moved into the country and continued to control most of northern and central Manchuria after the Soviet evacuation. In October, 1948, the Communists conquered the last few Nationalist-held areas.

As a result of extensive Japanese development, Manchuria became probably the richest industrial area in China, containing about two-thirds of her heavy industry and half her railway mileage.

The Communist People's government decided to concentrate its first efforts at industrial development in Manchuria.

Manchuria is also a rich agricultural region with a cultivable area estimated at 70,000,000 acres. Lumber from the forests of the East Manchurian Highlands ordinarily supplies the needs not only of the Manchurian plain but also of North China.

FORMOSA (TAIWAN)—Status: Province (Part of Republic of China).

Area: 13,836 square miles.

Population (est. 1949): 6,700,000

Capital: Taipei (Taihoku) (326,407).

Chief exports (almost entirely to China after World War II): sugar, coal, tea, cement.

Agricultural products: sugar cane (1946:

1,005,000 metric tons), rice (1948: 1,530,000 tons), tea (1947 exports: 4,744 tons), sweet potatoes, bananas, pineapples.

Industries: sugar refining, canning, cement, chemicals, wood, paper.

Minerals: gold, coal, petroleum, silver, sulfur.

Formosa is a large island in the western Pacific, separated from China to the west by the Taiwan straits (narrowest point, 90 mi.). The Pescadores (Bokoto) (about 77 sq. mi.) and other outlying islands became administratively a part of Formosa under Japanese rule. Formosa, ceded to Japan in 1895 after the Chinese-Japanese War, remained Japanese until it was restored to China in 1945, in accordance with the Cairo declaration. It was the only territory under the control of the Nationalist regime in 1950.

Most of the inhabitants are of Chinese stock. There are also about 150,000 aboriginal tribesmen in the mountainous interior. Sugar cane, grown under the plantation system, is the most prosperous of the island's developments.

Formosa is one of the world's chief sources of camphor, and government monopolies of camphor, salt, opium and tobacco have been established. Forest resources are enormous. In 1946, railway mileage totaled about 2,500, and roads 10,000.

SINKIANG (CHINESE TURKESTAN)—Status: Chinese province.

Area: 705,969 square miles.

Population (est. 1946): 3,870,954.

Capital: Tihwa (Urumchi) (20,000).

Chief exports: wool, cotton, furs, skins, sheep, cattle, horses.

Agricultural products: wheat, corn, rice, cotton, sorghum, beans, fruit.

Minerals: jade, gold.

Largest and most remote of China's provinces, Sinkiang experienced violent Mohammedan uprisings after 1932. The Chinese governor, Gen. Shen Shih-tsai, re-established order in 1937 with Soviet support. In 1943, Russian troops withdrew, taking with them all their economic installations, but following World War II Soviet influence was gradually restored and the province surrendered to the Chinese Communists in late 1949. On Mar. 27, 1950, the People's government signed an agreement with the U.S.S.R. providing for joint exploitation of Sinkiang's natural resources.

Chinese constitute about 5 per cent of the population; there are 14 other ethnic groups, mostly Turki tribes of the Sunni Moslem faith. The Mongol tribes are Lama Buddhists. There are vast stretches of desert and arid land, and the limited area under cultivation is mostly in oases and river valleys. The northern slopes of the Tien Shan range, which divides the province from east to west, provide rich summer grazing lands. There were in 1943,

11,720,000 sheep, 870,000 horses, 1,500,000 cattle and 90,000 camels.

Almost all of the limited foreign trade is conducted with Russia. Some caravan trade is carried on over the high passes which separate Sinkiang from India. There are no railroads, but 2,440 miles of road were built during 1932-42. An air route from Peiping to Alma Ata in the U.S.S.R. crosses the province. The largest towns are Shufu (Kashgar) (80,000) and Soche (Yarkand) (70,000), both near the western border. About 85 per cent of the population lives in the western side of the province, adjacent to the Soviet Union and separated from China by desert.

TIBET—Status: Under nominal Chinese suzerainty but politically independent.

Area: 469,294 square miles.

Population (est. 1948): 3,000,000.

Capital: Lhasa (50,000).

Ruler: The 14th Dalai Lama (Lingerh Lamutanchu).

Monetary unit: sang.

Exports: wool, live animals, salt, hides, borax, tea, musk.

Agricultural products: barley, fruits, pulse, vegetables.

Minerals: borax, salt, coal, gold.

Tibet, north and northeast of the Himalayas, is the highest country in the world, averaging 16,000 feet in elevation and having many peaks ranging up to more than 25,000 feet. Chinese suzerainty over Tibet was established in the 18th century. The area was invaded by a British expeditionary force in 1904, but the Anglo-Russian Convention of 1907 recognized China's influence and stipulated that neither Russia nor Britain should interfere in Tibet's affairs.

Chinese representatives were expelled in 1911-12, but in recent years Chinese-Tibetan relations have improved. The government is a theocracy, ruled by the Dalai Lama (born in 1935), who acts through a regent or minister appointed from among chief lamas.

The religion and predominant factor in Tibet's social system is Lamaism, a late form of Buddhism modified by animism and primitive magic. Education is in the control of the many monasteries, some of which have more than 1,000 monks. A large number of the population are lamas, mostly celibates. Both polyandry and polygyny are practiced.

Some agriculture and herding is possible in the valleys.

KWANTUNG—Status: Chinese territory under Soviet occupation.

Area: 1,444 square miles.

Population (est. 1938): 1,750,000.

Kwantung, at the southern end of Manchuria's Liaotung peninsula, was leased to Russia by China in 1898. The lease was transferred in 1905 to Japan, which ad-

ministered the territory until the end of World War II. The Chinese-Soviet treaty of 1945 provided for the return of the territory to China and for joint control of the naval base of Port Arthur; Dairen was to be a free port. The Soviet Union, however, refused to honor these provisions of the treaty and retained sole control of the area.

Port Arthur has an excellent ice-free, deep-water harbor which gives it great strategic importance. Dairen, the principal city (pop. 533,696), also has an ice-free harbor. Both Dairen and Port Arthur are connected with the Manchuria railways.

Colombia (Republic) (República de Colombia)

Area: 439,714 square miles.

Population (est. 1950): 11,259,730 (mixed 68%; white, 20%; Indian, 7%; Negro, 5%).

Density per square mile: 25.6.

President: Laureano Gómez.

Principal cities (est. 1950): Bogotá, 543,590 (capital); Medellín, 264,560 (mining); Barranquilla, 255,050 (chief port); Cali, 165,200 (coffee, mining).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Colombia, nearly nine times the size of New York state, is the only country in South America with frontage on both the Pacific and the Caribbean. Its northern coast was one of the first parts of the Americas to be visited by Spanish explorers. Darien, the first permanent European settlement on the American mainland, was founded in 1610, Santa Marta in 1525, and Bogotá in 1538.

New Granada, as Colombia was called until 1861, was comparatively neglected during the Spanish colonial era. After winning independence from Spain during a fourteen-year struggle ending in 1824, the country established a republic in 1831, including the area that now is Panamá. Intermittent civil war plagued Colombia until 1903, when Panamá, with United States backing, seceded from the republic.

The century-old boundary dispute with Peru over Leticia almost led to war in 1931, but a settlement was arranged through the League of Nations in 1934-35.

The administration of Alfonso López, Liberal president in 1934-38, introduced constitutional and labor reforms and the removal of state protection for the Roman Catholic Church. López won the presidency again in 1942 but resigned on Aug. 7, 1945. The provisional president, Alberto Lleras Camargo, was also a Liberal, but when the Liberal party split again in the elections of May 5, 1946, Mariano Ospina Pérez, a Con-

servative, won. The Liberals, however, retained control of Congress.

Bogotá, host at the time to the Ninth International Conference of American States, was swept by a destructive but unsuccessful revolt on April 9, 1948, following the assassination of Jorge Eliécer Gaitán, extremist Liberal leader. The 1949 presidential election, held on Nov. 27 and boycotted by the Liberals, was won by the Conservative candidate, Laureano Gómez, who took office on Aug. 7, 1950.

GOVERNMENT AND DEFENSE. Colombia's president, who appoints his own cabinet, is elected every four years and is not eligible to succeed himself immediately. The Senate—upper house of Congress—has 63 members elected for four years by direct vote. The House of Representatives of 123 members is directly elected for two years. All male citizens over 21 may vote.

A term of military service is compulsory for men between twenty-one and thirty. The strength of the army in 1948 was unofficially reported at 14,000. With 2,500 personnel, the navy has two modern destroyers, three sea-going gunboats, three patrol craft, four river gunboats, one frigate and several motor launches.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is free and technically compulsory in Colombia, whose last published illiteracy figure was 48.4 per cent. By law, 10 per cent of the national budget goes for education. In 1946, 12,324 primary schools reported enrollment of 711,798 pupils, and there were 2,267 other schools with total enrollment of 116,412. In addition to the National University, founded at Bogotá, 1572, there are four departmental universities and several private ones.

Because of the former isolation of the interior, the language and manners in Bogotá are more purely Castilian than anywhere else in South America. The white race retains its social and economic dominance over Indians and Negroes, but race mixture is steadily reducing its numbers. In recent years, notably since adoption of a new labor code in 1944, the working classes have made important gains, including minimum wages, vacations and holidays, accident and sickness benefits, and the protected right of union organization.

Most of the people live by farming and cattle herding, but only a small part of the land is cultivated, and that by primitive means. Colombia's coffee, by far the principal crop, is a mild variety that does not compete with Brazilian types. Production in 1949 was 6,148,391 bags of 132 pounds each. Other crops include bananas, coconuts, tobacco, sugar cane, corn, cotton, cacao, beans, rice, tropical fruits and, in the temperate regions on plateaus and in mountain valleys, cereals and potatoes.

Cattle in 1947-48 were estimated at 13,902,000 head, according to U.N. statistics.

The leading manufacturing industries are foodstuff processing, textiles and beverages. In 1945 there were 7,853 factories employing 135,400 workers.

To protect foreign trade balances, the government has taken over control of exports and imports. Trade statistics, in millions of pesos, are as follows:

	1947	1948	1949
Exports	446	509	594
Imports	639	589	499

In 1948 the U. S. took 84 per cent of the exports and supplied 70 per cent of the imports. The leading exports in 1947 were coffee (77 per cent) and petroleum (15 per cent), followed by bananas, platinum and gold.

Difficult terrain makes Colombia's rail and road building costly. Rail mileage, including many short feeder lines, was put at 2,159 in 1945; and highway mileage at 42,700, about 18 per cent improved. Air transit, however, is well advanced, and there are 4,620 miles of navigable waterways. The national merchant marine service has been combined with those of Venezuela and Ecuador.

Colombia's proposed 1950 budget provided for expenditures of 422,431,000 pesos. The public debt on Dec. 31, 1949, amounted to 512,094,781 pesos.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Through the western half of the country, three Andean ranges run north and south, merging into one at the Ecuadorean border. The eastern half is a low, jungle-covered plain, drained by spurs of the Amazon and Orinoco, inhabited mostly by uncivilized Indians.

Colombia's mountain ranges have many lofty peaks, including Huila, 18,700 ft., and Tolima, 17,109 ft. The fertile plateau and valley of the eastern range is the most densely populated part of the country.

Rich in minerals, Colombia has the fifth largest oil industry in Latin America (70 per cent controlled by U. S. interests). Production in 1949 was 29,644,000 barrels. The country is also rich in platinum and has world-famous emerald mines at Muzo in the eastern Andes. Mineral production includes crude platinum (1947: 38,715 troy ounces), gold (1949: 359,474 fine ounces) and silver (1949: 106,590 fine ounces).

Colombian forests, covering a large part of the country from the western Andes to the eastern plain, are a great but little exploited source of wealth. Products include vanilla, quinine, ipecac, sarsaparilla, gums and balsams, tanning agents, dyewoods, hardwoods and rubber.

Alligators along many of the large rivers

are hunted for hides. The rivers and lakes abound with fish and turtles, a source of commercial tortoise shell.

Although Colombia lies almost entirely in the north torrid zone, its climate is tempered by prevailing winds and high altitudes in the western, mountainous area. High temperatures and excessive moisture prevail in the lower areas, along the coast and in the larger river valleys. The dry season occurs in summer.

Costa Rica (Republic)

(República de Costa Rica)

Area: approximately 19,238 square miles.
Population (est. Dec. 31, 1949): 850,659
(white and mestizo, 97%; Negro, 2%; Indian, 1%).

Density per square mile: 44.2.

President: Otilio Ulate Blanco.

Principal city (est. 1949): San José, 93,858 (capital and only large city).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic (state).

HISTORY AND GOVERNMENT. Costa Rica was discovered and probably named by Columbus in 1502. A Spanish province as early as 1530, it proclaimed its independence in 1821, and was a member of the Central American Union from 1823-38. Aside from boundary disputes with Panamá and Nicaragua, Costa Rica's modern history was comparatively tranquil until the spring of 1948, when a brief civil war followed congressional annulment of presidential elections in which Otilio Ulate Blanco defeated the Government candidate. Leftist-supported government forces surrendered on April 20, and on May 8 an 11-man junta assumed control of the nation pending the drafting of a new constitution by a Constituent Assembly elected on Dec. 8, 1948. The Assembly met on Jan. 16, 1949, confirmed Ulate as president-elect, and, after drafting the new constitution, dissolved on Nov. 8, on which date Ulate took office.

Under the 1949 constitution the president and one-house Congress of 45 members are popularly elected for four years.

Military service is voluntary. There is an army of 500 men, a police force of 1,000, and 700 coast guards.

SOCIAL AND ECONOMIC CONDITIONS. Costa Rica's illiteracy rate of approximately 15 per cent is the lowest in Central America, with elementary education free and compulsory. In 1948, a total of 919 primary schools had 99,560 students; 44 secondary schools, 10,955 students; and the National University at San José, more than 800. Since 1944, English has been taught in all primary schools.

Coffee, bananas, abacá fiber and cacao

are the basic products of Costa Rican agriculture, which is characterized by the prevalence of small land holdings. Cotton, sugar cane, tobacco, corn, beans, rice and potatoes are subsidiary crops. Cattle are raised mainly for dairying.

Manufacturing is virtually limited to locally-consumed products, chiefly furniture, fine woodwork and tobacco.

Coffee normally represents more than half the country's export trade; exports in 1948 were 393,453 bags. Bananas, cacao and abacá fiber are the other main exports. Principal imports are cotton, oil, machinery, rail equipment, autos and iron products. Exports in 1949 totaled \$31,439,389 (72.4 per cent to the U. S.) and imports, \$43,351,519 (73.0 per cent from the U. S.). In 1948, the rail system totaled approximately 670 miles; improved highways, 1,020 miles.

The 1949 budget estimated revenue, ordinary and extraordinary, at 220,138,902 colones and expenditure at 217,730,382 colones. The public debt on Dec. 31, 1948, was 317,096,916 colones.

Gold (1948 exports: 1,322 troy oz.) is the most valuable mineral, although silver, manganese, mercury and sulfur also exist. Oil indications have been found in the south. The mountain slopes yield such forest products as balsa, cedar, dyewood, mahogany and rosewood. The fisheries along the coast are valuable; tuna, shark-livers and live turtles are important products. **TOPOGRAPHY AND CLIMATE.** Most of Costa Rica is elevated tableland, from 3,000 to 6,000 feet above sea level, with sharp slopes to the Caribbean and Pacific. Cocos Island, about 300 miles off the Pacific Coast, is under Costa Rican sovereignty; although it is mostly tropical jungle, it is of potential strategic importance in the defenses of the Panama Canal.

The weather is cool and refreshing in the Costa Rican highlands, with average temperatures of 68°, and San José is increasing in importance as a tourist resort. Along the coasts, the mean annual temperature is about 82°. The rainy season is usually from April or May to December.

Cuba (Republic)

(República de Cuba)

Area: 44,217 square miles.

Population (est. 1949): 5,295,000 (white and mulatto, 75%; Negro, 24%; Mongoloid, 1%).

Density per square mile: 119.8.

President: Carlos Prío Socarrás.

Principal cities (census 1943): Havana, 659,883 (capital, industrial center); Santiago de Cuba (1946 est.) 152,000 (seaport, mining); Marianao, 120,163 (suburb of Havana); Camagüey (1946 est.) 87,009

(cattle, sugar); Matanzas, 54,844 (seaport, sugar).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. The history of Cuba, largest of the many Caribbean islands, began for white men with discovery by Columbus on his first voyage in 1492. It was a Spanish colony until 1898, except for brief British occupancy in 1762-63. Open war raged between Cuban rebels and Spanish troops from 1867 to 1878. Fighting broke out again in 1895, and when the United States threatened to intervene, Spain felt its national dignity had been wounded. Strained relations between Spain and the U. S. led to war when the U. S. battleship *Maine* was blown up in Havana harbor in Feb., 1898. At the end of the brief Spanish-American War, Spain gave up Cuba.

Until creation of the Cuban republic in 1902, the island was ruled by United States military authorities. For the first thirty-two years of the republic's life, the United States held the right to intervene in any crisis—a right which was invoked during insurrections in 1906, 1912 and 1917.

Corruption bedeviled Cuba after World War I, particularly during the eight-year presidency of Gerardo Machado, who was ousted in a 1933 revolution. Five different presidents tried to rule in the next few months; out of this political whirligig came the dictatorship of Fulgencio Batista, who climbed almost overnight from army sergeant to army commander-in-chief. In 1940 Batista legalized his reign by being elected to a four-year presidential term. He was succeeded in 1944 by Dr. Ramón Grau San Martín, backed by the Republicans and his own Auténtico party. Carlos Prío Socarrás, government-sponsored candidate and strong anti-Communist, was elected president June 1, 1948, for a 4-year term beginning October 10.

GOVERNMENT. Cuba's president is elected for a 4-year term by direct popular vote, in which women take part. The Cabinet, though named by the president, is responsible to the Congress—a 54-member Senate and a 136-member House, both elected for four years. Much Cuban lawmaking is done through presidential decree, reviewable by the Supreme Court. Cuban politics are dominated by personalities, and there are frequent shifts in political grouping.

Compulsory military service was established in 1942. The army numbers about 17,000; the navy, 3,000, manning some twenty small coastal craft. The air force has 50 combat planes. Two U. S. air bases and one naval base built in World War II at a cost of more than \$30,000,000 were turned over to Cuba in 1946. However, the United States retained its long-held naval base at Guantánamo.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory from 7 to 14. Schools numbered about 5,400 in 1946, enrolling some 520,000 pupils. Literacy was estimated at close to 70 per cent. The University of Havana, founded in 1721, has about 15,000 students.

Recent social legislation has effected a 44-hour week, a month's vacation for each eleven months worked, and compulsory maternity and accident insurance. The proportion of unionized workers is the highest in Latin America.

Half of the employed are engaged in agriculture, which normally accounts for more than 90 per cent of the exports. Often jolted by fluctuations in the price of sugar, of which it produced about 6,126,000 short tons in 1950, Cuba is now seeking to vary its agricultural production. About two-thirds of the cultivated area is devoted to sugar cane. Other important crops are tobacco (1947-48: 27,605 metric tons); coffee (1947-48: 33,400 tons); cacao, fruits, vegetables, henequen, corn, pineapples and beans. The livestock and dairy industry has progressed greatly in the last two decades.

Manufactured products include sugar, molasses, syrup, brandy, rum, alcohol, cigars, cigarettes, cigar boxes, sponges, cement, cordage, salt, dressed hides, dairy products and canned goods. The leading industry is the processing of sugar cane and its products.

Foreign trade statistics, in millions of pesos, are as follows:

	1947	1948	1949*
Exports	773	724	578
Imports	520	527	451

* Provisional.

In 1948 the U. S. absorbed 52 per cent of the exports and supplied 78 per cent of the imports. The leading exports were sugar (82%), molasses (6%) and tobacco (4%).

Mainline railroads totaled 3,017 miles in 1949, plus 7,870 miles of industrial trackage, mostly on sugar estates. Improved highways totaled 2,320 miles. Domestic airlines are operated by the Cuban National Aviation Company, a Pan American subsidiary.

The preliminary budget for the fiscal year 1949-50 estimated ordinary revenue at \$97,704,519 and ordinary expenditure at \$97,543,800. The extraordinary budget balanced at \$134,517,412. The public debt (consolidated and floating) was \$180,412,075 on Aug. 31, 1946; the consolidated debt alone was \$107,305,000 on June 30, 1949.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Long, narrow Cuba has maximum dimensions of 730 by 160 miles, and is approximately the same size as

Pennsylvania. It has mountainous areas in the southeast, central area and west, but the rest is flat or rolling. The coastline of more than 2,100 miles is indented by many large bays. Cuba's numerous short rivers are of slight importance commercially.

Rich mineral beds, mostly in the eastern province of Oriente, include iron, copper, manganese, chromium and nickel. Iron ore reserves, estimated at 3,500,000,000 tons, are 90 per cent held by U. S. steel interests. Virtually all mineral exports go to the United States.

Cuba has an estimated 3,500,000 acres of wooded land, with valuable cabinet woods, such as cedar and mahogany, as well as fibers, resins and oils. Lobsters, oysters, crabs and shrimp are major sea food products.

The tempering influence of the trade winds on the island's tropical climate makes Havana's average temperature 77°, with a range of only 10° (71° to 81°). The dry season lasts from November to April, and the warmer wet season occurs thereafter. Mean annual rainfall at Havana is about 50 inches.

Czechoslovakia (Republic)

(Československa Republika)

Area: 49,330 square miles (excluding Ruthenia).

Population (est. Dec. 31, 1949): 12,519,000; (Czech, 67.0%; Slovak, 23.7%; German, 3.2%; Magyar, 3.2%; Polish, Jewish and others, 2.9%).

Density per square mile: 253.8.

President: Klement Gottwald.

Premier: Antonín Zapotocký.

Principal cities (est. 1948): Prague (Praha), 932,024 (capital, industrial center); Brunn (Brno), 277,196 (textiles); Ostrava (formerly Moravská Ostrava), 183,794 (iron and steel); (1947): Bratislava, 172,664 (Danube port); Pilsen (Plzeň), 118,152 (Skoda steel works).

Monetary unit: Koruna.

Religions (1930): Roman Catholic, 73.54%; Protestant, 7.67%; Czechoslovak Church, 5.39%; Greek Catholic, 3.97%; Jewish, 2.42%; others, 7.01%.

HISTORY. Few nations have had a more tragic history than Czechoslovakia, which twice won and lost its independence within 30 years. Born out of World War I, the young republic was an early victim of Nazi aggression in 1938-39. At its rebirth in 1945 following World War II, it enjoyed a measure of its traditional democracy under the shadow of Soviet control. During the next three years Czechoslovakia made by far the greatest economic progress of all the Soviet satellites, but the government was subjected to increasing Communist pressure, climaxed in the spring of 1948 by the Communists' seizure of complete con-

trol and the resignation of President Beneš.

It was probably about the 5th century, A.D., that the ancestors of the Czechs and Slovaks settled in the region of modern Czechoslovakia. Slovakia passed under Magyar domination, but the Czechs founded the kingdom of Bohemia, which was among the most powerful in Europe for centuries. German encroachment began in the 12th century and was furthered by the election in 1526 of a Hapsburg as Bohemian king. After the Czechs rebelled in 1618 and were defeated at the Battle of White Mountain in 1620, they were ruled for the next 300 years by the Hapsburgs as part of the Austro-Hungarian Empire. In World War I, Czech patriots, notably Thomas G. Masaryk, went abroad to promote support for Czech independence, while Czech legions fought against the Central Powers. On Oct. 28, 1918, Czechoslovakia proclaimed itself a republic; shortly thereafter Masaryk was unanimously elected first president.

Between World Wars I and II, Czechoslovakia supported the League of Nations, formed the Little Entente with Yugoslavia and Rumania, and co-operated closely with France. President Masaryk resigned in 1935, two years before his death at the age of eighty-seven, and was succeeded by Dr. Eduard Beneš.

Meanwhile, the German plan of aggression was under way. Czechoslovakia's German minority, led by Konrad Henlein, began demanding autonomy. The government granted many concessions which, of course, were not enough to suit the Germans. The beginning of the end came at the Munich conference on Sept. 30, 1938, when France and Britain agreed that the Nazis could take the Czech Sudetenland on the German border. Dr. Beneš resigned on October 5, and Czechoslovakia became a federal union in the German orbit. The Poles, in the meantime, had seized Czechoslovakia's Teschen area, and Hungary had taken areas in Slovakia and Ruthenia. In March, 1939, the Nazis set up Slovakia as a puppet state, declared Bohemia and Moravia to be Nazi protectorates, and gave Hungary the remainder of Ruthenia. Both Slovakia and Bohemia-Moravia were occupied by German troops.

Czechoslovakia suffered cruelly under Nazi occupation, but Czech patriots were not deterred from widespread sabotage and slowdowns which hindered the Germans. Meanwhile, Dr. Beneš had organized a government-in-exile in London in 1940, with Jan Šrámek as Premier and himself as President. Soon after the government returned to Czechoslovakia in April, 1945, Ruthenia, the easternmost province, was ceded to Russia.

A 300-member Constituent Assembly elected on May 26, 1946, had 114 Commu-

nist members, and on July 3, 1946, Communist Klement Gottwald formed a six-party coalition cabinet. Amid increasing pressure from Moscow, Gottwald's cabinet remained in office until the bloodless coup d'état of Feb. 23-25, 1948, when the Communists seized complete control of the republic. As they took over, Foreign Minister Jan Masaryk, son of the founder of Czechoslovakia, committed suicide. President Beneš stayed on until June 7, when he resigned following parliamentary elections in which the Communists and their allies were unopposed. Parliament elected Gottwald to the presidency, and Communist Antonin Zapotocky succeeded to the premiership. Beneš died Sept. 3, 1948. Again the Czechs had lost their hard-won liberties, and the government began a systematic suppression of democracy.

GOVERNMENT AND DEFENSE. Czechoslovakia's Soviet-type constitution, promulgated on June 8, 1948, makes the 300-member unicameral Parliament the supreme organ of the state with control over courts and civil service. The government is headed by the president, elected by Parliament for a seven-year term, and the prime minister and his cabinet who are appointed by the president but are responsible to Parliament. The constitution contains nominal guarantees of civil liberties and provides that the state shall conduct all economic activity in the public interest on the basis of a single economic plan. Provision is made for limited Slovak autonomy under an elected council of 100 members.

The army, based on a cadre of Czech units which fought with the Red Army during World War II, has been trained and equipped by the Soviet Union with organization and armament on its pattern. Estimated strength is 160,000, including police.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is low in Bohemia, higher in Slovakia. In 1947 there were 11,850 elementary schools with 998,200 students; 2,100 higher grade schools with 399,000; 335 secondary schools with 119,000, and 700 vocational schools with 99,800. The 7 universities had a total enrollment of 50,750 in 1948.

One of the country's greatest problems is the ethnic variety of its population. In view of the traitorous role played by German and Hungarian minorities in the disintegration of Czechoslovakia in 1938-39, the government decided to expel them from the country. Many Hungarians, however, were permitted to remain.

Decrees of the government issued on Oct. 24, 1945, ordered the nationalization of almost all industrial corporations with more than 500 employees. All national resources, public utilities, transport, commercial banks and insurance companies became state property. Other laws enacted April 28,

1948, nationalized all enterprises employing more than 50 as well as concerns of any size operating in key industries.

Distribution of large estates had already been accomplished following World War I by the 1919 Land Reform Law, which made it illegal for one person to own more than 370 acres of arable land. The social insurance system covers accident, sickness, disability, old age and death.

In 1947, 37.7 per cent of the employable population was engaged in agriculture, 34.8 per cent in industry, 6.4 per cent in commerce, 4.9 per cent in transportation and 10.5 per cent in public service and the professions.

Approximately 41 per cent of the total area is arable, 31 per cent forest, and 15 per cent meadows and pastures. Sugar beets (1949: 4,466,000 metric tons), wheat (1,573,000 tons), corn and high-grade barley and hops for beer-brewing are cultivated in the low-lying areas. In more elevated regions the cultivation of potatoes (1949: 6,263,000 tons), rye (1,339,000 tons) and oats predominates. Higher lands are also used for growing fodder crops or for grazing. The livestock census of 1949 enumerated 3,663,000 cattle, 3,242,000 hogs, 459,000 sheep and 640,000 horses.

The highly developed position of Czech industry is important in foreign trade, since production far exceeds domestic needs. Agricultural products, led by sugar, provide raw materials for important industries. The beer industry has attained world-wide repute, and there are also spirits, malt and foodstuffs industries. Abundance of coal and presence of iron ore give the country a big metallurgical industry. Output of raw steel in 1947 was 2,285,700 metric tons; of pig iron, 1,422,500 tons. The Skoda steel works at Pilsen are one of the largest in Europe.

Other industries are glass, porcelain and pottery making, while large forest areas provide raw material for the timber, paper and cellulose industries. Also highly developed are the textile industries, including cotton, wool, flax and jute production, and the shoe industry. The famous Bat'a shoe factories are at Zlín. Industrial employment, exclusive of building, totaled 1,395,000 in June, 1949.

Foreign trade is now a state monopoly managed by government corporations. Statistics, in billions of koruny, are as follows:

	1947	1948	1949
Exports	28.55	37.65	40.31
Imports	28.92	37.72	39.40

Leading exports in 1948 were iron and steel manufactures, 16.6 per cent; machinery (except electrical), 9.8 per cent; cotton textiles, 7.7 per cent; glass, 6.1 per cent; and vehicles, 6.0 per cent. Chief imports

were cotton, 8.1 per cent; maize, 5.3 per cent; and chemical products, 4.2 per cent. Leading customers were the U.S.S.R., 16.0 per cent; Poland, 7.0 per cent; Yugoslavia, 6.9 per cent; and the Netherlands, 6.4 per cent. The chief suppliers were the U.S.S.R., 15.6 per cent; Britain, 10.1 per cent; and Yugoslavia, 6.3 per cent. Reorientation of trade from west to east was virtually complete.

The disadvantages of Czechoslovakia's landlocked position are offset somewhat by a well-developed system of internal communications. Czech railroads, totaling 8,200 miles in 1948, form a direct connection between the systems of eastern and western Europe, making the country an important communications center. Highway mileage totaled 39,560.

Navigable streams total 1,156 miles in Bohemia-Moravia, and 111 miles in Slovakia. Internal waterways and rivers connect Czechoslovakia with the Black Sea and the North Sea.

Recent government finance data are as follows (in billions of koruny):

	1948	1949*	1950*
Revenue	69.5	89.3	131.9
Expenditure	78.6	89.3	131.6

* Budget estimate.

National debt (Dec. 31, 1948): internal, 100,531,739,000 koruny; external, 20,318,953,000 koruny.

Most important of Czechoslovakia's varied minerals are pit coal and lignite, with the principal coal fields in the Ostrava-Karvinná area, connected with the Polish fields of Upper Silesia. Production in 1949 was 17,004,000 metric tons of hard coal and 26,520,000 tons of lignite.

Production of iron ore in 1948 was 1,429,000 tons, but much ore is imported to meet the demands of Czechoslovakia's flourishing iron and steel industry. Excellent porcelain raw materials, particularly kaolin (1947: 607,553 tons), are obtained in western Bohemia and southern Moravia. Other minerals are antimony, gold, magnesite, oil, uranium, silver and zinc.

Czechoslovakia is one-third wooded and is one of the richest forest lands in Europe, with a high production of lumber.

TOPOGRAPHY AND CLIMATE. A long and narrow country, with a length of 594 miles from east to west and a width varying from 45 to 175 miles, Czechoslovakia lies athwart the great central European watershed between the Baltic, Black and North Seas. Mountains form several of its boundaries—the Carpathians by Poland on the northeast, the Böhmer Wald by Austria on the southwest, and the Erzgebirge and the Sudetens by Germany on the northwest and north. Many of the valleys are made

fertile by the Danube, Elbe and Vltava (Moldau) rivers and their tributaries. The Elbe and Danube are usually icebound for six to eight weeks each year.

At Prague, in Bohemia, the average annual temperature is 48.2° (29.6° in January; 66.2° in July) and the average annual rainfall is 19.6 inches. The corresponding figures for Presov, in eastern Slovakia, are 46.8° and 25.6 inches. Heavy winter snowfall is common in the highlands.

Denmark (Kingdom)

(Kongeriget Danmark)

Area: 16,575 square miles.

Population (est. Jan. 1, 1950): 4,250,000 (almost entirely Danish).

Density per square mile: 256.4.

Sovereign: King Frederick IX.

Prime Minister: Hans Hedtoft.

Principal cities (est. 1950): Copenhagen, 764,999 (capital); Aarhus, 114,344 (shipping); Odense, 98,766 (meat, dairy products); Aalborg, 65,152 (seaport).

Monetary unit: Krone.

Language: Danish.

Religion: Evangelical Lutheran (state).

HISTORY. Denmark—comprising a peninsula and 500 islands in the Baltic Sea—is a vast produce farm, less than half the size of Indiana. Because of its rich production of meat, butter and eggs, it suffered almost no material damage from German occupation in World War II. Needing the Danish food, the Nazis permitted the Danish farmers to continue producing, and when the war was over and much of Europe was a starving ruin, Denmark emerged as a land of comparative plenty. Its principal economic difficulty was a lack of foreign exchange.

A tiny nation today, Denmark once was powerful and feared. After conversion of the Danes to Christianity in the 9th and 10th centuries, Canute the Great, King of Denmark, conquered England in 1015. In the 12th and 13th centuries, under Kings Valdemar I and II, Denmark reached the zenith of its power. By the terms of the Union of Kalmar in 1397, the nation was united with Norway and Sweden. Sweden left the Union in 1520, but Denmark and Norway remained united until 1814. In the Napoleonic Wars Denmark picked the wrong side; when Napoleon was defeated, Norway was given to Sweden and Helgoland to Britain in 1814. Denmark lost again in 1864 when, after a war with Austria and Prussia, it lost Holstein, Schleswig and Lauenburg to Prussia.

The country, which had become a liberal constitutional monarchy in 1849, stayed neutral in World War I, after which a plebiscite returned to it a part of North Schleswig. In 1917 Denmark sold the Virgin

Islands to the United States for \$25,000,000.

The Social Democrats, moderately socialistic, dominated Danish politics in 1924-26 and 1929-40 during an era marked by active participation in the League of Nations and close harmony with Norway and Sweden.

On May 31, 1939, eager for peace, Denmark signed a ten-year non-aggression pact with Germany. Less than a year later, on April 9, 1940, Germany invaded neutral Denmark. The British countered by occupying the Faeroe Islands and Iceland. Iceland declared its complete independence from Denmark in 1944, thus breaking a union which had existed since 1280.

To save the country from destruction, King Christian X accepted the German occupation without armed resistance, and the Danish policy became one of passive resistance against Hitler's attempts to form a "model protectorate." During 1944-45, the Danish underground became increasingly active and effective.

Following the German surrender in 1945, the Danes quickly took over their government again with Social Democrat Vilhelm Buhl as prime minister. Buhl resigned when his party lost ground in the national elections of Oct. 30, 1945, and the King designated Liberal leader Knud Kristensen to form a new all-Liberal cabinet in Nov., 1945. Kristensen lost the confidence of the Folketing in Oct., 1947, as a result of his advocacy of a plebiscite in South Schleswig (Germany) looking toward annexation of at least part of the region to Denmark. The Social Democrats increased their plurality in the resulting elections, and on November 11, Hans Hedtoft was named prime minister.

King Christian X—revered symbol of Danish resistance in World War II—died April 20, 1947, and was succeeded by his elder son, Frederick.

RULER. Frederick IX, of the house of Schleswig-Holstein-Sonderburg-Glücksburg, Denmark's 49th King, was born March 11, 1899. In 1935 he married Princess Ingrid of Sweden, by whom he has three daughters. Succession is limited to the male line, and the heir presumptive is his brother, Prince Knud, born July 27, 1900. The King's uncle is King Haakon VII of Norway.

GOVERNMENT AND DEFENSE. Under the constitutional act of 1915, amended in 1920, Denmark is a constitutional hereditary monarchy. Legislative authority rests jointly with the king and the two-house Rigsdag. The 149-member Folketing (lower house) is popularly elected every four years but can be dissolved by the king at will. Members of the Landsting (upper house) are elected for eight years—56 by

popular vote and 19 by the outgoing Landsting. The cabinet, presided over by the king, who designates the prime minister, is the highest executive power, handling new bills and important measures.

The 1950 lineup in the Folketing (elections of Sept., 1950) was Social Democrat 59, Agrarian Liberal 32, Conservative 27, Radical Liberal 12, Single Taxer 12, Communist 7.

Military service is compulsory. The army, numbering about 12,000, is being re-equipped with British assistance. One infantry brigade of 4,000 men is stationed in the British zone of Germany. In 1948 the navy had ten destroyer escorts, three submarines, two frigates, a corvette and other smaller craft. Personnel numbers 4,000.

SOCIAL AND ECONOMIC CONDITIONS. Under the Danish system, schooling is compulsory from 7 to 14 and, for the most part, free. The famous popular high schools (*folkehøjskoler*) for adults number 55, all private but assisted by the state. The Royal University of Copenhagen, founded in 1479, has about 6,500 students and that of Aarhus about 1,100. Elementary schools in 1947 had 481,395 students; middle and secondary schools had about 84,400.

Social legislation is well advanced and provides for medical aid, poor relief, child welfare and workmen's compensation. The National Insurance Act requires everyone from 21 to 60 to belong to an approved sickness benefit society, to which the state also contributes. The co-operative movement is also well organized.

Approximately ninety per cent of the land is productive and about three-quarters is actually farmed. Agrarian reform laws have operated to bring about a large number of small holdings. About two-fifths of the cultivated area is devoted to cereals, led by barley, mixed grain, oats, rye and wheat. Root crops (fodder), potatoes and sugar beets also are important. The principal source of exports and of the nation's wealth is dairy farming and the production of bacon and pork (1949: 276,000 metric tons), butter (156,000 tons), beef and veal (131,000 tons), eggs (118,000 tons), cheese (64,000 tons) and milk (1948: 4,068,000 tons). Livestock in 1949 included 2,949,000 cattle, 2,684,000 hogs and 27,635,000 poultry. Total value of farm and dairy production in 1949 was about 4,480,000,000 kr. Farming keeps pace with scientific advances.

Denmark produces primarily for home consumption, though some industrial products, such as Diesel motors, are large exports. In 1947 there were 7,224 larger establishments with 212,040 workers and an output valued at 6,420,000,000 kr. The largest industries were food-processing and iron and metal. Others were chemical and

pharmaceutical, wood and paper, clothing, textiles, machinery, beverages and leather.

Trade statistics, in millions of kroner, are as follows:

	1947	1948	1949
Exports	2,316	2,731	3,564
Imports	3,086	3,419	4,205

Leading suppliers in 1949 were Great Britain (31.7 per cent), the U. S. (16.0 per cent) and Sweden (6.6 per cent). Chief customers were Great Britain (43.8 per cent), Germany (7.5 per cent) and Norway and Sweden (each 5.2 per cent). Leading exports were dairy products, largely butter and eggs (40.4 per cent), meat and products (7.9 per cent), machinery (7.7 per cent) and fish (5.3 per cent). Leading imports were coal and coke, iron and steel, petroleum and products, and fodder.

The Danish merchant marine, one of the largest in the world on a per-capita basis, had 299 larger ships of 1,033,300 gross tons on June 30, 1949. Regular communications with foreign countries are mainly westward by sea. There are Swedish ferry services from Copenhagen to Malmö and from Helsingör (Elsinore) to Hålsingborg.

The main land route to the rest of the continent is the railway via Padborg and Schleswig to Hamburg. Railway mileage totals about 3,050, nearly half nationalized. Train-ferry services for inter-island communication are highly organized. Motor transport also is well advanced, with about 35,000 miles of roads.

Recent public-finance data are as follows (in millions of kroner):

	1948-49	1949-50*	1950-51*
Revenue	3,135	2,066	1,943
Expenditure	3,164	2,073	1,943

* Budget estimate.

The national debt totaled 10,659,000,000 kr. on March 31, 1949.

Mineral resources are negligible, although some coal, granite and kaolin are found on the island of Bornholm. Large quantities of coal and coke must be imported. Peat bogs supply an important source of fuel. Forest resources are unimportant.

The fishing industry, centered at Copenhagen but carried on also in the shallow fiords and in the deeper waters of the Baltic, North Sea and Skagerrak, is a basic part of the Danish economy. The 1949 catch of about 226,000 metric tons was valued at 190,000,000 kr. Normally about two-thirds of the catch is exported, usually fresh, ice-packed, or live.

TOPOGRAPHY AND CLIMATE. Denmark, only three miles from Sweden at the closest point, consists of the Jutland peninsula and the islands in the Baltic. The largest islands are Zealand, the site of Copen-

hagen; Fünen; and far to the east, Bornholm. The narrow waters to the north are called Skagerrak; and to the east, Kattegat.

The terrain of the whole kingdom is low but not flat. Its highest point is about 500 feet, and there are many lakes, ponds and short rivers. Sand dunes line the western Jutland coast almost without a break.

Denmark's climate is like that of eastern England, but with colder winters and warmer summers. The average annual temperature is 45.2° (61° in July; 32° in January). Average rainfall is 24 inches; thunderstorms are frequent in summer.

Outlying Territories

FAEROE ISLANDS—Status: Autonomous part of Denmark.

Area: 540 square miles.

Population (census 1945): 29,198.

Capital: Thorshavn (population 3,611).

Government: Danish-appointed governor and locally-elected assembly.

Principal products: cod, whale oil, cod liver oil, wool, fertilizers, skins and leather.

This group of 21 islands, lying in the North Atlantic about 200 miles northwest of the Shetland Islands, joined Denmark in 1386 and has since been part of the Danish kingdom. The islands were occupied by British troops during World War II, after the German occupation of Denmark. The principal pursuits are fishing and sheep grazing. The predominant *Sjálfstýrissíðokkur*, or Home Rule party, heads a movement seeking autonomy. Those favoring independence won a slight majority in a plebiscite held Sept. 14, 1946, but subsequent elections gave pro-Danes a majority. However, a bill enacted Mar. 30, 1948, established home rule.

GREENLAND—Status: Colony.

Area: 839,782 square miles (almost 85 per cent glacier).

Population (1946): natives, 21,379; Europeans, 450.

Government: Two inspectorates (Godthaab and Godhavn) supervised by the director for Greenland in Copenhagen.

Principal products: cryolite (1947: exports to U. S., 19,500 tons; to Denmark, 20,900 tons), fish, hides and skins, whale and fish oil, marble.

Greenland, the world's largest island, was colonized in 985-86 by Eric the Red. Danish sovereignty, which covered only the west coast, was extended over the whole island in 1917. In 1941 the United States signed an agreement with the Danish minister in Washington, placing it under U. S. protection during World War II but maintaining Danish sovereignty. U. S. weather stations were built on the island during the war. Greenland is the only source of natural cryolite, important in the manufacture of aluminum. Trade (except cryolite) is a Crown monopoly.

Dominican Republic

(República Dominicana)

Area: 19,327 square miles.

Population (est. 1949): 2,246,000 (mestizo and mulatto, 70%; white, 15%; Negro, 15%).

Density per square mile: 116.2.

President: Rafael Leónidas Trujillo y Molina.

Principal cities (est. 1949): Ciudad Trujillo, 151,555 (capital; sugar); Santiago de los Caballeros, 64,439 (tobacco); San Pedro de Macoris, 24,922 (sugar port); Puerto Plata, 17,513 (seaport).

Monetary unit: Dominican peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. The Dominican Republic (formerly San Domingo) occupies the eastern two-thirds of the island which Columbus named La Española (now Hispaniola) when he discovered it on his first voyage in 1492. The other third is occupied by the republic of Haiti. The capital, Ciudad Trujillo, founded in 1496, is the oldest white settlement in the Western Hemisphere.

The Dominican Republic was variously under Spanish, French and Haitian domination until it established its independence in 1865 and then plunged into an unstable political history. U. S. Marines occupied it from 1916 to 1924, when a new constitution was adopted. In 1930, Rafael Leónidas Trujillo y Molina, an army general, was elected president. In office most of the time since then, Trujillo has brought about improved irrigation, roads, sanitation and schools, and in May, 1947, he was elected for another term.

The president is elected every five years by popular vote, in which women take part, and he is eligible to be re-elected indefinitely. The 19-member Senate and the 40-member Chamber of Deputies are also elected for five years. Each of the eighteen provinces has an appointed governor. There is a 12,000-man army, a small air force and several coast patrol craft.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory from 7 to 14. In 1948, there were 2,578 schools, with 242,545 students. The government began construction of a university city in 1946.

Primarily agricultural, the country produces sugar (1949: 477,054 metric tons), coffee (20,853 tons), tobacco (19,832 tons), cacao, bananas, rice, corn, cassava, beans and sweet potatoes.

The raising of hogs and cattle has been expanded recently, and the government is attempting to diversify crops to lessen the republic's dependence on sugar exports. Sugar refining, largely U. S. controlled, is the only important manufacture.

Foreign trade (in millions of pesos):

	1947	1948	1949
Exports	83.2	82.8	73.7
Imports	53.4	65.3	42.8

Leading exports in 1949 were sugar (53 per cent), cacao (12 per cent), coffee (10 per cent) and tobacco (8 per cent). Chief customers were Britain (42 per cent), the U. S. (28 per cent) and Canada (4 per cent). The main imports, mostly from the U. S., are cotton goods, iron and steel products, chemicals and machinery.

Transit facilities include about 170 miles of public railway, more than 600 miles of sugar plantation railway, and more than 3,000 miles of highway.

The 1949 budget estimated expenditures at \$66,719,649 and revenues at \$66,735,260. The Republic's foreign debt was retired in July, 1947; the remaining public debt was \$8,053,797.

Mineral resources are limited and production is negligible. Some gold and gypsum are produced for export. The more readily accessible timberland has been thoroughly exploited, producing mahogany, lignum vitae and pine.

TOPOGRAPHY AND CLIMATE. Crossed from northwest to southeast by a mountain range with maximum elevations exceeding 10,000 feet, the country has fertile, well-watered land on the northeast side, where nearly two-thirds of the population lives. The southwest part is arid and with poor soil except around Ciudad Trujillo. The country has many good harbors.

There is little range in temperature, with mean January average of 74°, and August average of 81°. The elevated interior is cooler than the coastlands. Rainfall occurs mostly from May to November.

Ecuador (Republic)

(República del Ecuador)

Area: 104,510 square miles.

Population (est. 1949): 3,467,399 (80% pure Indian, 25% mestizo, 15% white).

Density per square mile: 33.2.

President: Galo Plaza Lasso.

Principal cities (est. 1947): Guayaquil, 212,025 (chief port); Quito (census 1947) 200,185 (capital); Cuenca, 57,873 (trading center); Riobamba, 30,634 (sugar, cereals).

Monetary unit: Sucre.

Languages: Spanish, Quéchua.

Religion: Roman Catholic.

HISTORY. Mostly forested and mountainous and a little larger than Colorado, Ecuador has a long history replete with the forceful rule of dictators. The Spanish under Francisco Pizarro conquered the land in 1532 by defeating the Inca Atahualpa. The first revolt against Spain occurred in 1809, but the victory was not

complete until the Battle of Pichincha on May 24, 1822. Ecuador then joined Venezuela and Colombia in a confederacy founded by Simón Bolívar and known as Colombia, but withdrew amicably and became independent in 1830. The country's subsequent history has been largely one of dictatorships, notably under Juan José Flores, Gabriel García Moreno and Eloy Alfaro. Since 1900, administrations have fallen, usually by force, on the average of every two years. Shortly before the 1944 elections, President Carlos Arroyo del Río was forcibly replaced by José Velasco Ibarra, recalled from exile in Argentina. Velasco Ibarra, confirmed in office by the voters later in the same year, followed the old pattern by assuming the role of dictator in 1946 and suppressing opposition.

Ibarra was deposed in Aug., 1947, and after three weeks of confusion Carlos Julio Arosemena took over as provisional president until Sept. 1, 1948, when Galo Plaza Lasso, victor in the June 6 elections, took office.

For more than a hundred years, Ecuador disputed its boundary with Peru, frequently resorting to arms. After hostilities started again in 1941, both nations submitted to mediation, and when the decision was made final in 1944, Ecuador lost most of the disputed area.

GOVERNMENT AND DEFENSE. Under the 1946 (16th) constitution, Ecuador elects a president for four years by direct vote, and he is ineligible for further service until at least one term intervenes. The congress is bicameral, with a Senate and Chamber of Deputies. There are 17 provinces and one territory, the Galápagos Islands (3,029 sq. mi.), 650 miles off the coast.

Military service is compulsory at eighteen. The army numbers 10,000 and 40,000 reserves. A 1,030-ton training ship and several smaller craft make up the navy. There is an aviation school at Guayaquil and a naval school at Salinas. To strengthen defenses of the Panama Canal, the U. S. built a base on Galápagos during World War II; it reverted to Ecuador in 1946.

SOCIAL AND ECONOMIC CONDITIONS. Education is free, compulsory and under state control, but illiteracy is very high—an estimated 60 per cent in 1948. School enrollment in 1948-49 was put at 264,271 in 3,425 public and private primary schools and at 18,015 in 127 secondary schools. There are universities at Quito (2), Guayaquil and Cuenca, and a law school at Loja.

Although agriculture is the basis of Ecuador's economy, less than 12,000,000 acres are devoted to it. Cacao, the chief crop (1948: 16,100 metric tons) is grown in the coastal regions and lower river valleys, along with rice, sugar cane, coffee, ba-

nanas, tobacco and cotton. The plateaus and mountain valleys are used for grazing and dairying, and raising cereals and potatoes. Ecuador's main manufactured product is the Panama hat, made of Toquilla straw.

Foreign trade statistics, in millions of sucres:

	1947	1948	1949*
Exports	595	559	374
Imports	604	625	602

* Provisional.

In 1949, the U. S. took 59 per cent of the exports and supplied 70 per cent of the imports. Chief exports in 1948 were rice (41 per cent), cacao (39 per cent), coffee (8 per cent) and petroleum (5 per cent).

Railway mileage in operation in 1949 was 698, all nationalized. The principal road connects the chief port, Guayaquil, with Quito. Highway mileage in 1947 was 2,712.

The 1950 budget was estimated at 388,000,000 sucres. The foreign debt on June 30, 1948, was \$38,738,000; the internal debt, 97,455,000 sucres.

Ecuador mined 80,982 troy oz. of gold and 277,047 oz. of silver in 1949. Copper and lead also are mined. In 1949, 2,535,233 barrels of petroleum were produced. The country is the world's chief source of light, strong balsa wood, and exported 2,120 metric tons in 1949; but exports have declined steadily since 1943. Exports of rubber—1,968 metric tons in 1945—had dropped to 75 tons by 1947. Dye wood, cinchona bark, kapok and vegetable ivory are other products of the vast forest.

TOPOGRAPHY AND CLIMATE. Two high and parallel ranges of the Andes, traversing Ecuador from north to south, are topped by tall volcanic peaks including Chimborazo (20,577 feet) and Cotopaxi (19,344). The region between the mountains and the coast is rich but extremely hot and swampy; beyond the mountains to the east is the rainy, forested and tropical Amazon plain, largely uninhabited.

Though Ecuador, as its name implies, lies on the equator, its climate ranges from tropical and temperate to the Arctic conditions of its snow-capped peaks. Temperatures on the coast average 83°; on the Andean plateau, about 46° to 70°. The rainy season extends from December through April or May.

Egypt (Kingdom)

(Misr)

Area: approximately 383,000 square miles.

Population (est. 1948): 19,528,000 (1944: Egyptian, 95.4%; Arabian, 1.7%; Greek, .6%; others, 2.3%).

Density per square mile: 50.9.

Sovereign: King Farouk I.

Premier: Mustapha Nahas Pasha.
Principal cities (census 1947): Cairo, 2,100,506 (capital); Alexandria, 925,081 (chief port); Port Said, 178,432 (Suez Canal terminus); Tanta, 139,965 (railroad center, Nile delta); Mansûra, 102,709 (cotton).

Monetary unit: Egyptian pound (£E).

Language: Arabic.

Religions: Mohammedan, 91%; Christian (mostly Copt and Greek Orthodox), 7%; others, 2%.

HISTORY. Egypt, half again the size of Texas, and the largest and most influential of the Arab states, has been an object of big-power controversy for centuries.

Egyptian history dates back to about 4000 B.C., when the kingdoms of upper and lower Egypt, already highly civilized, were united. Egypt's "Golden Age" coincided with the 18th and 19th dynasties (16th to 13th centuries B.C.), during which the empire was established. Persia conquered Egypt in 525 B.C.; Alexander the Great subdued it in 332 B.C., and then the dynasty of the Ptolemies ruled the land until 30 B.C., when Cleopatra, last of the line, committed suicide and Egypt became a Roman province. From 641 to 1517 the Arab caliphs ruled Egypt, and then the Turks took it and made it part of their Ottoman Empire. Napoleon's armies occupied the country from 1798 to 1801. In 1805, Mohammed Ali, leader of a band of Albanian soldiers, became Pasha of Egypt, founding the present line of rulers. After completion of the Suez Canal in 1869, the French and British took increasing interest in Egypt.

British troops occupied Egypt in 1882, and British resident agents became its actual administrators, though it remained under nominal Turkish sovereignty. On Dec. 18, 1914, this fiction was ended and Egypt became a British protectorate.

Pressure by Egyptian nationalists forced Britain to declare Egypt an independent, sovereign state on Feb. 28, 1922, although the British reserved rights for the protection of the Suez Canal and the defense of Egypt. On Aug. 26, 1936, by an Anglo-Egyptian treaty of alliance, all British troops and officials were to be withdrawn, except from the Suez Canal zone. When World War II started, Egypt remained neutral. But it early became a strategic base for Allied forces, both because of its key location for countering German offenses in North Africa and because of the vital importance of the Suez Canal. British imperial troops finally ended the Nazi threat to Suez in 1942 in the decisive battle of El Alamein, west of Alexandria.

British troops were evacuated from Cairo and Alexandria in 1946, but Anglo-Egyptian negotiations for revision of the 1936 treaty broke down after British refusal to recognize Egyptian sovereignty over the Anglo-Egyptian Sudan. Egypt brought the

problem before the U. N. Security Council on Aug. 5, 1947, but the Council advised resumption of direct negotiations.

In March, 1942, the Wafd (Nationalist) party won the elections and controlled the government until its cabinet was dismissed by the king in October, 1944. Ahmed Maher Pasha, leader of the Saadist party (an offshoot of the Wafdists), formed a coalition cabinet of all parties except the Wafd. He was assassinated on Feb. 24, 1945, while reading a declaration of war against the Axis. Mahmoud Fahmy el-Nokrashy Pasha, the Saadist foreign minister, succeeded him. He gave way to Ismail Sidky Pasha on Feb. 15, 1946, but returned to power on Dec. 10, 1946 with a Saadist-Liberal cabinet. He was assassinated Dec. 28, 1948, and was succeeded by Ibrahim Abdul Hadi Pasha who resigned on July 25, 1949 and, in turn, was succeeded by Hussein Sirry Pasha. The general elections of Jan. 3, 1950, resulted in an overwhelming victory for the Wafd party, and Mustapha Nahas Pasha assumed office as premier on Jan. 12.

Egyptian forces made a rapid advance into southern Palestine in May, 1948, but they bore the brunt of Israeli counterattacks later in the year and were forced back in several areas prior to the Israeli-Egyptian armistice of Feb. 24, 1949.

RULER. King Farouk I, who was born Feb. 11, 1920, succeeded his father, Fuad I, on April 28, 1936. He was married on Jan. 20, 1938, to Farida Zulfikar, granddaughter of a former prime minister, and divorced her in Nov., 1948. Their children are Princess Ferial, born in 1938; Princess Fawzieh, 1940, and Princess Fadia, 1943.

Since succession is limited to the male line, the heir presumptive is Prince Mohammed Ali, born in 1875, a first cousin to the king.

GOVERNMENT AND DEFENSE. Egypt is a constitutional hereditary monarchy. The bicameral Parliament has a Senate of 147 members, two-fifths of whom are appointed by the king and the rest popularly elected for 10 years (half renewable every five years); and a Chamber of Deputies of 319 members popularly elected by universal male suffrage for five years unless sooner dissolved by the king. The king acts through a cabinet appointed by him, but responsible to Parliament.

Elections for the Chamber of Deputies held Jan. 3, 1950, gave the Wafdists 228, Saadists 28, Liberals 26, National party 6, Socialists 1 and Independents 30.

Under the Anglo-Egyptian Treaty of 1936 the peacetime strength of British troops in the Suez Canal zone is set at 10,000, with 400 air force personnel, but no limit is set in time of war or international emergency. Military service for Egyptians is compulsory. The Egyptian army, strength-

ened and modernized during World War II, has about 160,000 men, including police units under military control. The air force has about 150 combat planes, and the navy has several small vessels.

SOCIAL AND ECONOMIC CONDITIONS.

Education is compulsory between the ages of 7 and 12. In 1947-48 there were 5,700 elementary schools with attendance of about 2,000,000, and 1,450 other schools with 170,000 students. The University Mosque of el-Azhar in Cairo (founded A.D. 972) is the chief theological seminary of the Moslem world. The University of Fuad I in Cairo (founded 1908) and the University of Farouk I in Alexandria (founded 1943) had 22,000 students in 1948-49, and three other universities had 12,540 students.

The majority of the people are Sunni Moslems. The Christians are mainly Copts with an admixture of Armenian, Syrian and Maronite sects. The population divides generally into fellahin (peasantry) and townspeople of the same blood, the Bedouin or nomad Arabs of the desert, and the Berbers, who occupy the Nile valley between Aswan and Dongola. The foreigners are chiefly Greeks (whose main center is Alexandria), French, British and Italians.

Egypt has one of the highest birth rates in the world (often more than 40 per 1,000 population) and one of the highest death rates. The density of the population in the small inhabited area in the Nile valley and delta (about 13,600 sq. mi.) is far greater than that of Belgium or Bengal.

Agriculture is the chief industry, engaging more than half the population. Only about 3.5 per cent (8,620,850 acres) of the total area is arable, and only about 6,040,000 acres are actually under cultivation, almost entirely in the Nile valley and delta. More than half the cultivated area comprises farms of less than 20 acres. Irrigation is indispensable to agriculture; the Aswan reservoir above the first cataract of the Nile holds up to 5,500,000,000 cubic meters of water and that of Gebel Aulia, in the Anglo-Egyptian Sudan, 2,000,000,000 cubic meters. In the delta and in middle Egypt, where perennial or canal irrigation is possible, two or three crops a year can be grown. The chief cash crop is cotton, of which Egypt is a leading producer.

Production statistics for 1949 were as follows: raw sugar, 191,000 metric tons; rice (paddy), 1,168,000 tons; cotton, 369,000 tons; maize, 1,242,000 tons; barley, 138,000 tons.

Other crops include wheat, garden crops, dates and grapes. The pastoral industry is relatively unimportant except to the Bedouins in the eastern desert. In 1947 there were 1,317,639 cattle, 1,238,756 buffalo

(used to turn water wheels for irrigation), 1,868,261 sheep, 1,473,840 goats, 196,084 camels and 1,124,961 donkeys.

Industry includes sugar refining, cotton ginning, cement manufacture, milling and pottery, soap and perfume making. The French-controlled Sugar Company of Egypt holds a monopoly on sugar refining.

Foreign trade statistics (in millions of Egyptian pounds):

	1947	1948	1949
Exports	89.5	143.1	138.0
Imports	99.6	160.3	167.5

In 1949, Egypt's chief customers were India 20 per cent, Britain 17 per cent, France 8 per cent and Italy 8 per cent. Leading suppliers were Britain 21 per cent, Italy 8 per cent and the U. S. 8 per cent. Raw cotton (77%) and rice (10%) were the chief exports. Imports included machinery, vehicles, textiles, coal, petroleum and metals and manufactures.

Navigable throughout its course in Egypt, the Nile is used largely as a means of cheap transport for heavy goods. The principal port is Alexandria. Railway mileage in 1949 totaled 5,235. Branch lines link Cairo and Alexandria with Suez and nearly every town in the delta. Highway mileage was 8,870 in 1948. Cairo is a major airport.

Final budget estimates for the fiscal year 1949-50 placed expenditures at £E187,500,000 and revenues at £E157,800,000. The public debt was £E148,000,000 on Dec. 31, 1949.

The most important minerals are manganese ore (1949: 138,000 metric tons), phosphate (1949: 350,000 tons) and petroleum (1948: 13,250,000 barrels). Gold, iron ochres, nickel, sodium carbonate, sulfate talc and tungsten also are mined.

Egypt has no forests. Total value of fishery products is about £E2,000,000 annually, representing a catch of 50,000 metric tons. The chief fishing ground is Lake Menzala in the delta, but fish are also caught along the coast of the delta and in the Nile.

TOPOGRAPHY AND CLIMATE. Egypt, at the northeast corner of Africa, is a very rough square, with the historic Nile flowing northward through its eastern third. On either side of the Nile valley are desert plateaus, spotted with oases. In the north, toward the Mediterranean, plateaus are low, while south of Cairo they rise to a maximum of 1,015 feet above sea level. At the head of the Red Sea, at the northeast corner of Egypt, is the triangular Sinai peninsula, between the Suez Canal and Palestine.

The Nile delta starts 100 miles south of the Mediterranean and fans out to a sea front of 155 miles between Alexandria and Port Said. From Cairo north, the Nile branches into many streams, the principal

of which are the Damietta and the Rosetta, joined by a network of canals.

Except for a narrow belt on the Mediterranean, Egypt lies in an almost rainless area, in which high daytime temperatures fall quickly at night. The mean temperature at Cairo varies between 53° in January and 84° in July; at Alexandria, between 57° in January and 81° in July. South of Cairo, pure desert conditions prevail; at Aswan the mean maximum temperature is 118°.

SUEZ CANAL. The Suez Canal, in Egyptian territory between the Arabian Desert and the Sinai peninsula, is an artificial waterway about 100 miles long between Port Said on the Mediterranean and Suez on the Red Sea. Construction work, directed by the French engineer Ferdinand de Lesseps, was begun April 25, 1859, and the canal was opened Nov. 17, 1869. The cost was 432,807,882 francs. The concession is held by a French company, *Compagnie Universelle du Canal Maritime de Suez*, in which the British government holds 295,028 out of a total of 652,932 shares. The concession expires Nov. 17, 1968, when it will revert to the Egyptian government. An agreement signed March 7, 1949, provided for greater Egyptian participation in management and profits. On the board of management in 1950 were one Dutch, one American, 2 Egyptian, 16 French and 10 British directors.

SUEZ CANAL STATISTICS

Year	Ships	Tonnage	Receipts
1938	6,127	34,249,745	1,784,278,091 fr.
1946	5,057	32,731,631	£12,246,800
1947	5,972	36,576,581	£13,147,200
1948	8,686	55,081,056	£E18,382,900
1949	10,420	68,861,548	£E22,869,700

In 1949, 36.1 per cent of the tonnage was British; 12.9 per cent U. S.; 11.6 per cent Norwegian; 8.8 per cent Panamanian; and 7.6 per cent French.

ANGLO-EGYPTIAN SUDAN—Status:

Anglo-Egyptian condominium.

Area: 967,500 square miles.

Population (1948): 7,919,000.

Capital: Khartoum (pop. 1947: 61,800).

Governor General: Sir Robert Howe.

Foreign trade (1948): exports, £E24,700,000; imports, £E22,100,000. Chief export: raw cotton and cotton seed (75.6%).

Agricultural products: cotton seed, ginned cotton (1949: 55,000 metric tons); millet, sesame, wheat, peanuts.

Minerals: gold, salt.

Forest product: gum arabic (exports 1947: 25,968 metric tons).

About one-fourth the size of Europe, Anglo-Egyptian Sudan extends from north to south about 1,200 miles and west to east about 1,000 miles. Before the revolt against Egyptian rule by the Arabized

tribes under Mohammed Ahmed (the Mahdi) in 1882–84, the region was known as Egyptian Sudan. Since its reconquest by the Anglo-Egyptian expeditions of 1896–98, it has been known by its present name. A governor general, appointed by the king of Egypt on British recommendation, is assisted by an executive council of 12 to 18 members.

During the 1946 treaty negotiations, Egypt demanded union of the area with the Egyptian crown, but important Sudanese groups favored complete independence. The aim of the British administration in Sudan was described as the establishment of self-government as a first step toward eventual independence. On June 19, 1948, the governor general published an ordinance which provided for an assembly of 75 members, 65 elected, with limited legislative powers in domestic affairs. Assembly elections held Nov. 16, 1948, were won by the native group favoring independence.

The northern region is a continuation of the Libyan Desert. The southern region is fertile, abundantly watered and, in places, heavily forested. It is traversed from north to south by the Nile, all of whose great tributaries are partly or entirely within its borders. The highest elevation is a mountain range parallel to the Red Sea, with heights of 4,000 to over 7,000 feet. Sudan is the chief source of gum arabic; the southern forests also are rich in fibers and tannins.

There are two trunk railways, one connecting Sudan with Egypt and the other affording access to the chief port, Port Sudan, on the Red Sea.

The whole country lies within the tropics and has an exceedingly hot climate—greatest in the central area and least in the desert zone, where the temperature range is large. At Khartoum the mean annual temperature is 80°, with January the coldest and June the hottest month.

Estonia

Area: 18,357 square miles.

Population (est. 1940): 1,126,415 (Estonians, 88%; Russians, 9%; Germans [Balts], 1%; others, 2%).

Density per square mile: 61.4.

Principal cities (est. 1938): Tallinn, 146,400 (capital); Tartu, 60,100 (university town); Narva, 24,200 (seaport).

Language: Estonian (Finno-Ugrian).

Religions: Lutheran, 78%; Greek Orthodox, 19%; others, 3%.

Born out of World War I, this small Baltic state enjoyed two short decades of independence before it was absorbed again by its powerful neighbor, Russia. In the thirteenth century, the Estonians had been

conquered by the Teutonic Knights of Germany, who reduced them to serfdom. In 1521, the Swedes took over, and the power of the German (Balt) landowning class was curbed somewhat. But after 1721, when Russia succeeded Sweden as the ruling power, the Estonians were subjected to a double bondage—the Balts and the tsarist officials. The oppression lasted until the closing months of World War I, when Estonia finally achieved independence.

Shortly after the start of World War II, the nation was occupied by Russian troops and was incorporated as the 16th republic of the U.S.S.R. in 1940. Germany occupied the nation from 1941 to 1944, when it was retaken by the Russians. Most of the nations of the world, including the U. S. and Great Britain, have not recognized the Soviet incorporation of Estonia.

Ethiopia (Kingdom)

(Abyssinia)

Area: 350,000 square miles.

Population (est. 1948): 8,000,000 (Abyssinian [Amhara], 20%; Galla, 50%; others, 30%).

Density per square mile: 22.9.

Ruler: Emperor Haile Selassie I.

Prime Minister: Bitwoded Makonnen Endalkatchau.

Principal cities (est. 1948): Addis Ababa, 250,000 (capital); Harar, 45,000 (coffee); Dessie, 35,000 (grain center); Dire Dawa, 30,000 (railway workshops).

Monetary unit: Ethiopian paper dollar.

Languages: Amharic, Arabic.

Religions: Copt (Christian), Mohammedan.

HISTORY. Ethiopia, a land-locked African kingdom more than twice the size of California, was one of the first victims of the Axis aggression that culminated in World War II. Italy, after creating fake border incidents, invaded the country on Oct. 3, 1935, and Addis Ababa fell on May 5, 1936. Haile Selassie, the emperor, fled the country, and the Italians welded Ethiopia, Italian Somaliland and Eritrea into the colony of Italian East Africa.

World War II brought early liberation; Ethiopia, in fact, was the first of the Axis-occupied nations to be retaken by the Allies. British and Ethiopian troops reconquered the country in 1941, with the final Italian surrender occurring on Nov. 27. During a transition period thereafter, the nation was under dual Anglo-Ethiopian control. Under an agreement signed on Jan. 31, 1942, British troops quit the country except for stipulated border areas. The latter were evacuated in Aug., 1948.

After the war, the country launched a modernization program in agriculture, industry and education. Irredentist claims to the ex-Italian colonies and former Ethi-

opian provinces, Eritrea and Somaliland, began to be voiced in 1946.

The Ethiopian royal family claims descent from the Queen of Sheba and from Menelek, a son of King Solomon. Christianity was introduced about A.D. 330, and after the Arab conquest of northern Africa in the 7th century, Ethiopia was more or less cut off from the outside world for a thousand years. When Theodore III proclaimed himself emperor in 1853, the country was a conglomeration of autonomous provinces under hereditary chiefs who were usually at war with one another. Menelek II, who ascended the throne in 1889, brought Ethiopia under single rule, and his forces finished off a five-year Italian attempt at invasion with a great massacre at Aduwa on March 1, 1896. Revenge for this massacre was one of Mussolini's great war cries in the 1935-36 invasion.

GOVERNMENT. Ethiopia's ruler, Haile Selassie I, was born on July 17, 1891, crowned king on Oct. 7, 1928, and emperor on Nov. 2, 1930. His eldest son, the crown prince and heir apparent, is Asfa Wassan, born on July 27, 1916. The emperor directly controls the government, though there now is a Council of Ministers, a Senate and a Chamber of Deputies. All members are appointed by the monarch, however. The country is divided into 12 provinces.

In wartime, military service is compulsory. The small Ethiopian standing army is equipped and trained by a British military mission.

SOCIAL AND ECONOMIC CONDITIONS. The education system is extremely backward. Foreign missions or the government maintain schools in the principal towns, and several secondary schools recently have been set up. In 1948, there were 390 primary schools with 35,000 pupils and 3 secondary schools with 450. The Coptic Church (Christian), with its numerous priests, exercises powerful influence and owns much Ethiopian land. It became independent of the Coptic Archbishop of Alexandria in 1946. Moslems, numerous in frontier regions, have their religious center at Harar. The towns of Ethiopia are scattered and crudely built.

Ethiopia is generally fertile, predominantly agricultural and pastoral, with many regions yielding two crops a year. The chief crops are maize, wheat, barley, rye, cotton, sugar cane, millet, hemp, vegetables, coffee and teff (the common bread grain). The country's inadequate transport system, however, makes crop growing largely a local industry.

The country grazes several million cattle, and many goats and sheep. Horses and mules are bred extensively as pack animals and mounts. There is little manufacturing except for small native industry, although

the Italians built some industrial plants during their five-year occupation.

Recent trade data are as follows (for years beginning Sept. 11, in millions of Ethiopian dollars):

	1946-47	1947-48	1948-49
Exports*	69.1	85.4	71.0
Imports	69.0	105.0	90.5

* Excluding specie.

Chief exports in 1948-49 were coffee, 23.9 per cent; hides and skins, 27.0 per cent; and cereals, 23.5 per cent. Cotton goods and yarn accounted for 47 per cent of the imports.

The 486-mile track from Addis Ababa to Djibouti in French Somaliland is Ethiopia's only rail outlet and its principal trade route. Motorable roads, non-existent until about 1925, now include about 1,000 miles built by the government, and 4,340 miles built during the Italian occupation. The long rainy season makes road maintenance difficult, and air traffic has become increasingly important, especially as a means of communication with foreign commercial centers. The National Ethiopian Line serves internal and neighboring areas.

Ethiopia is seeking the help of foreign architects in the modernization of Addis Ababa, which, since the days of Menelek, has been a sprawling town of mud huts and tin roofs.

The 1947 budget was estimated to balance at approximately Eth.\$50,000,000.

Gold, produced from placer mines worked by natives in the south and west, is Ethiopia's main mineral. Platinum also is mined in fair commercial quantities. Other minerals are rock salt, cinnabar, copper, iron, mercury, mica, potash and sulfur. Oil deposits are believed to exist, and all drilling rights have been sold to the Sinclair Refining Company of the United States.

Vegetation is dense in the valleys and lowlands, but the plateau is comparatively bare, especially in the north. The forests contain many valuable trees, including the Natal yellow pine.

TOPOGRAPHY AND CLIMATE. Over its main plateau-land, Ethiopia has several high mountains; Dashan, the tallest peak, towers to 15,158 feet northeast of Lake Tana. Most of the many rivers are rapid, not navigable, and flow into the Nile. The Blue Nile, or Abbal, rises in the northwest and flows in a great semicircle east, south and northwest before entering Sudan. Its chief reservoir, Lake Tana, lies in the northwestern part of the plateau.

Ethiopia, lying wholly within the tropics, escapes a torrid climate because of its elevation, although the lowlands are hot.

The mean annual range of temperature is between 60° and 80°, although Alpine conditions prevail in the higher mountains. The dry season lasts generally from October to June, the wet season from June to September.

Finland (Republic)

(Suomen Tasavalta)

Area: 130,160 square miles.

Population (est. Dec. 31, 1949): 4,040,000 (Finnish, 91%; Swedish, 9%).

Density per square mile: 31.0.

President: Juho K. Paasikivi.

Premier: Urho K. Kekkonen.

Principal cities (est. 1949): Helsinki, 359,813 (capital); Turku (Åbo), 99,274 (seaport, shipbuilding); Tampere, 95,753 (textiles, paper); Lahti, 42,364 (glass, lumber); Porv, 41,353 (timber).

Monetary unit: Markka (FM).

Languages: Finnish, Swedish.

Religions (1937): Evangelical Lutheran, 97%; Greek Orthodox, 1.7%; Roman Catholic, .02%; others, 1.28%.

HISTORY. The Finns, a people of possibly Mongolian origin, first settled their Montana-sized area about A.D. 100. King Eric IX of Sweden conquered them about 1155 and introduced Christianity. Under Swedish rule, which lasted for 650 years, the Finns retained considerable autonomy and were given their own parliament in the 17th century.

Political pressure growing out of the Napoleonic Wars forced Sweden in 1809 to cede Finland to Russia, which gave the Finns a constitution and set them up as a grand duchy. Out of the chaos and complexities of World War I, the Russian revolution of 1917 and a Finnish civil war in 1918 between "Reds" and "Whites" led by Baron Carl G. von Mannerheim, Finland emerged as a republic in 1919. A year later Russia ceded to Finland the Petsamo area with its ice-free Arctic port.

For the next twenty years Finland was generally orderly and prosperous except for vigorous suppression of Communists and a bloodless rightist uprising in 1932. The national presidents during this period were K. J. Ståhlberg, 1919-25; Lauri Relander, 1925-31; P. E. Svinhufvud, 1931-37; and K. Kallio, 1937-40.

In Nov., 1939, the Russians attacked Finland to enforce territorial demands. The sturdy Finns stood off large-scale Red Army assaults for 105 days, but finally lost and ceded to Russia 10 per cent of the nation's area, including the Karelian isthmus. Under German pressure and somewhat in a spirit of revenge, the Finns joined the Nazis against Russia in 1941—and lost again.

Risto Ryti, a pro-German who succeeded Kallio as president in 1940, was forced to resign on Aug. 1, 1944, and was replaced by Baron Carl G. von Mannerheim (who had led Finnish forces in both wars with the U.S.S.R.) Finland severed relations with Germany on Sept. 2, signed an armistice and concluded a provisional peace treaty with Britain and Russia, Sept. 19. The U. S. had not declared war on Finland.

Pro-Russian Juho K. Paasikivi became premier on Nov. 11, 1944, and when Mannerheim resigned because of illness on March 4, 1946, Paasikivi was elected by the Diet to fill the unexpired presidential term. The premiership went to Mauno Pekkala, leader of the new Socialist Unity Party, made up of dissident and left-wing groups advocating cooperation with Communists.

Since then the Finns, burdened by the heavy reparations load, have made good progress in rehabilitating their war-torn areas and industrial plants. Politically they have steered a cautious but realistic course acceptable to the Soviet Union, in whose orbit the country now must turn. Political liberty has been preserved to a surprising extent despite widely differing factions ranging from extreme left to far right.

The Communists and their allies lost ground in the July, 1948, parliamentary election and on July 29, Karl August Fagerholm formed a Social Democrat government in which the leftist bloc was not represented. Paasikivi was re-elected for a full 6-year term in Feb., 1950, and on Mar. 17, Fagerholm was succeeded as premier by Urho Kekkonen at the head of a centrist minority cabinet.

GOVERNMENT. Under the 1919 constitution, the 200 Diet members are popularly elected by a proportional representation system for three-year terms. The president, normally chosen for six years by an electoral college of 300 members nominated by the people, acts through his Cabinet headed by the prime minister. Suffrage is universal. Because of the many political parties, government usually is carried on by a coalition, with frequent cabinet changes.

Party standing in the Diet after the July 1, 1948, elections was as follows (1945 standing in parentheses): Social Democrats, 54 (50); Agrarian, 56 (49); Democratic Union (Communists and Socialist Unity), 38 (49); Conservative, 28 (33); Swedish People's, 14 (14); others, 5 (10).

PEACE TREATY OF 1947. The final peace treaty became effective Sept. 15, 1947; it confirmed the de facto cession to the U.S.S.R. of the Petsamo area, Viipuri and the Karelian region and also of the Porkkala-Udd area west of Helsinki for use as a Soviet naval base. Finland was to pay reparations of \$300,000,000 in kind (re-

duced to \$225,000,000 by the U.S.S.R. in 1948) over a period of eight years from Sept. 19, 1944, and was to make two-thirds compensation to United Nations nationals for wartime property loss.

The treaty limited Finnish defense forces to the following strengths: army, 34,400 personnel; navy, 4,500 personnel and a tonnage of 10,000; and air force, 3,000 personnel and 60 aircraft. The possession of bombers, submarines, atomic weapons and motor torpedo boats is prohibited.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is very low (.9% beyond the age of 15). Education is compulsory from 7 to 15. In 1947 there were 5,520 elementary schools with 453,000 students, and 279 secondary schools with 82,000 pupils. There are three regular universities, of which Helsinki has the largest enrollment (9,263 in 1948).

About 60 per cent of the total population is engaged in agriculture, 17 per cent in mining and industry, 3.8 per cent in transport, 4.3 per cent in commerce, 2 per cent in professions and 11 per cent in miscellaneous occupations. Considerable progress has been made in social legislation, including workmen's compensation. The cooperative movement is extensive. By a 1927 law, expropriation of large estates was carried out, with compensation to their owners.

Only about 3 per cent of the land is under cultivation, and about 5 per cent in grassland. The chief crops (with estimated 1949 production in metric tons) are oats, 633,023; barley, 176,190; rye, 206,166; and potatoes, 1,047,606. Grazing lands are extensive. In 1949 there were 1,542,040 cattle, 1,066,508 sheep, 409,273 hogs and (1947) 95,601 reindeer.

In 1946 there were 5,691 larger manufacturing establishments in Finland, with 236,723 workers and an output valued at \$824,190,000. The leading manufactures are wood and paper (about one-third the total value), food, luxury items, machinery and textiles. Following the cession of the Karelian isthmus and the city of Viipuri to the U.S.S.R., Finland lost valuable manufacturing areas. Helsinki is the principal industrial center.

Trade statistics, in billions of markkas, are as follows:

	1947	1948	1949
Exports	55.68	68.05	77.88
Reparations*	10.40	11.55	12.23
Imports	46.87	66.44	66.28

* Included in export totals.

Leading free exports in 1949 were wood and wood products (48.9 per cent) and paper and paper products (40.7 per cent). Leading suppliers by percentage were Britain (18.1), the Netherlands (8.7), and the

U.S.S.R. (8.6). Chief customers were Britain (26.0), the U.S.S.R. (15.2), and the U. S. (7.5).

The merchant marine on Dec. 31, 1949, totaled 657 merchant vessels of 534,473 gross tons. The numerous lakes, many joined by canals, are busy transport routes. About 40,000 vessels and 18,000 timber rafts use the canals annually. There were approximately 19,700 miles of highway in 1946 and 17,500 miles of secondary roads. Railway mileage in 1948 totaled 3,084, almost entirely nationalized.

Recent public finance data are as follows (in billions of markkas):

	1947	1948*	1949*
Revenue	94.3	72.5	98.5
Expenditure	87.8	72.4	98.5

* Budget estimate.

The total public debt was estimated at 139,800,000,000 FM on Dec. 31, 1949, as compared with 4,074,200,000 FM in Sept., 1939.

Finland has no coal or oil, and many of its ore deposits are remote from transportation. Finland's sulfide ore, with yearly production of about 300,000 tons, is 4 per cent copper, 26 per cent sulfur and 27 per cent iron, with some zinc, cobalt, gold and silver. Limestone, soapstone and red granite deposits are extensive, and uranium deposits are believed to exist. Wood and peat are the only natural fuels.

More than a third of Finland is covered with high quality timber, the nation's richest natural resource. Timber production in 1949 totaled about 840,000 standards of 161 cu. ft. each, cellulose, 1,015,025 metric tons and mechanical pulp 598,226 tons. Production of paper was 521,000 tons and cardboard 105,000 tons.

Finnish have fished for centuries, not commercially, but for domestic consumption. The 1947 catch was 46,000 metric tons and was valued at \$23,000,000.

TOPOGRAPHY AND CLIMATE. Finland stretches 700 miles from the Gulf of Finland on the south to Soviet Petsamo, north of the Arctic Circle. Off the southwest coast are the Åland Islands (approximately 300), controlling the entrance to the Gulf of Bothnia. Finland has more than 60,000 lakes. Of the 1939 area, 11 per cent was lake and 48 per cent swampland. Of the few rivers, only the Oulu (Uleå) is navigable to any important extent. Most of the country is tableland 400 to 600 feet above sea level, with a rise to 4,115 feet in the Hailuittijokko region of the northwest.

Finland's long severe winters are moderated somewhat along the coast by prevailing southwest winds, but the summer lasts only about two and a half months. Southerly Finnish ports are icebound part of the year. Rainfall is light, with the driest months from May to September.

France (Republic) (République Française)

Area: 212,741 square miles.
Population (est. Jan. 1, 1950): 42,000,000 (1946: French, 94.2%; others, 5.8%).
Density per square mile: 197.4.
President: Vincent Auriol.
Premier: René Pleven.
Principal cities (est. 1948): Paris, 2,800,000 (capital); Marseille, 700,000 (chief port); Lyon, 470,000 (silk, metal manufacture); Toulouse, 285,000 (tobacco; commercial center); Bordeaux, 250,000 (wine; seaport); Nice, 235,000 (resort center); Nantes, 210,000 (manufacturing).
Monetary unit: Franc.
Religion (est.): Roman Catholic, 97.5%; Protestant and others, 2.5%.

HISTORY. One of the world's great centers of culture, art and learning, France was bled and devastated in World Wars I and II and emerged in mid-1944 after more than four years of Nazi occupation as a shattered nation.

France was ancient Gaul when Julius Caesar conquered a part of it in 57-52 B.C.; for several centuries thereafter it was bound to the Roman Empire. In the 5th century A.D., it was overrun by the Franks and other barbarian tribes. Between 768 and 814, Charlemagne created a Frankish empire covering most of Western Europe, but by the time Hugh Capet came to the throne in 987, his kingdom comprised only the region around Paris. For more than 300 years the Capets struggled to unify the many feudal fiefs.

Philip VI, cousin of the last Capet and first of the House of Valois, took the throne in 1328. Soon thereafter began the Hundred Years' War (1338-1453), the struggle over England's bid to seize the French crown. The English won at Crécy in 1346 and at Agincourt in 1415; but were defeated at Orléans in 1429 by the French forces led by Joan of Arc. Cruel persecution of French Protestants, the Huguenots, was followed by civil war and then the Edict of Nantes in 1598, by which the Huguenots received complete religious freedom from Henry IV, first of the Bourbons.

Splendor, wealth and the establishment of a colonial empire marked the long reign of Louis XIV from 1643 to 1715. Extravagance, however, forced Louis XVI to struggle with the problem of taxation at a time when the forces of revolution were coming to a head among France's lower and intellectual classes. The French Revolution, of world significance for its impact on absolute rule, broke out in 1789. Louis XVI was deposed in 1792 and executed the next year. Then came the Reign of Terror as the revolution swung to excess, the Directory from 1795 to 1799, and the Consulate from 1799 to 1804, after which Napoleon was proclaimed emperor. Mean-

while, French armies were engaged on all sides, spreading French hegemony over most of western and central Europe. The final downfall came at Waterloo on June 18, 1815.

The restored Bourbon, Louis XVIII, reigned until 1824 and was succeeded by his reactionary brother, Charles X, who was overthrown in the revolution of 1830. His successor, Louis Philippe, was unseated in 1848, and succeeded by Napoleon's nephew, Louis. Inaugurated president of the Second Republic in 1848, Louis Napoleon became emperor as Napoleon III in 1852 but abdicated after France's defeat in the Franco-Prussian War of 1870-71. The resultant conflict between republicans and monarchists was resolved by the adoption of a republican constitution in 1875, which established the Third Republic to replace the provisional Republic set up in 1871.

Victorious with the Allies in World War I under Premier Georges Clemenceau, France emerged as the dominant power on the continent. From 1919 on, its aim was to keep Germany weak through a system of military alliances and by maintaining a strong French army.

The effort was a dismal failure. At home France was weakened by economic and political instability, with many short-lived cabinets. Germany became a dictatorship, with the full national energy bent toward war. The Third French Republic, permitting political freedom, bickered and argued away its years. The leftist "Popular Front" coalition cabinets of Léon Blum (1936-37) and Camille Chautemps (1937-38) were succeeded by the Radical and Radical-Socialist cabinet under Édouard Daladier, one of the men of Munich.

Paul Reynaud took Daladier's place on March 21, 1940, less than seven months after the start of World War II. In May, 1940, Hitler's armies finally poured into France and on June 16, the reins of government fell to Marshal Henri Philippe Pétain, who opposed continuation of the war. An armistice with Germany was signed June 22, dividing France into occupied and unoccupied zones. The Third Republic was voted out of existence on July 10 by the National Assembly at Vichy, and Unoccupied France became totalitarian, with Pétain as chief of state.

Meanwhile, in London, General Charles de Gaulle had formed on June 18, 1940, a provisional French National Committee which received British recognition and represented the interests of free Frenchmen. De Gaulle's government-in-exile was moved to Algiers in June, 1943, as the French Committee for National Liberation.

After the liberation of Paris, De Gaulle formed a provisional government in the capital on Sept. 10, 1944. It remained in

power as a theoretically non-political régime until the elections of Oct. 21, 1945, when a National Assembly was selected to draw up a new constitution and serve as an interim legislative body. De Gaulle was named provisional President on Nov. 13 but resigned soon after and was succeeded by Félix Gouin, a Socialist, on Jan. 23, 1946.

A proposed constitution providing for a strong legislature and weak executive was rejected by the electorate on May 5, 1946. The new National Assembly, elected June 2, named Popular Republican Georges Bidault as interim President. France's new constitution was approved by a narrow margin on Oct. 13, and the Fourth Republic formally took shape early in 1947 with the election of Socialist Vincent Auriol as President, Jan. 16, and the confirmation of Socialist Paul Ramadier as Premier, Jan. 22.

Ramadier was succeeded on Nov. 22, 1947, by Robert Schuman, a Popular Republican, whose government was beset on one hand by Communist agitation, and on the other by General de Gaulle's campaigns for new elections.

Socialist demands for reduction of the armed forces budget forced Schuman's resignation on July 19, 1948; he was succeeded by Radical-Socialist André Marie. Marie resigned late in August and Schuman formed another cabinet, which lasted approximately 64 hours. Henri Queuille, another Radical Socialist, replaced Schuman on Sept. 7. Under his leadership the nation made important progress. In Oct., 1949, he resigned over a wage-price controversy and was succeeded by Georges Bidault, whose resignation in June, 1950, was followed by a cabinet crisis in which a new government formed by Queuille lasted only three days. René Pleven formed a cabinet which was approved by Parliament on July 13, 1950.

GOVERNMENT. Under the constitution approved Oct. 13, 1946, France is a secular, democratic and social republic. The dominant power in the new Republic is the National Assembly, whose members (621 in 1950) are elected by universal direct suffrage. There is also a Council of the Republic of 320 members elected by a complicated indirect procedure requiring 8 different elections. This house has only advisory and delaying powers and is definitely subordinate to the Assembly. The two Houses together elect the President of the Republic for a 7-year term, but his choice of a Premier and the latter's choice of cabinet ministers require Assembly ratification. All ministers are collectively responsible to the Assembly for the general policy of the Cabinet and are individually responsible for their personal actions.

The National Assembly elections of Nov.

FRANCE AND THE FRENCH UNION

Country	Area, sq. mi.	Population, estimated
France	212,741	42,000,000 (1950)
Africa		
French Equatorial Africa	959,983	4,003,733 (1946)
Chad	454,940	1,902,221 (")
Gabon	91,405	383,715 (")
Middle Congo	175,630	655,497 (")
Ubangi-Shari	238,008	1,062,300 (")
Cameroun	169,436	2,850,000 (1947)
Algeria	851,078	8,983,100 (")
Morocco	153,870	8,617,000 (")
Tunisia	60,209	3,463,328 (")
French West Africa	1,805,210	16,325,000 (1948)
Dahomey	45,560	1,474,000 (")
French Guinea	95,366	2,130,000 (")
French Sudan	450,579	3,137,000 (")
Hauts Volta	94,208	3,044,000 (")
Ivory Coast	120,849	2,031,000 (")
Mauritania	449,806	524,000 (")
Niger	472,973	2,041,000 (")
Sénégal	75,869	1,994,000 (")
Togo	20,463	944,446 (")
French Somaliland	8,376	47,000 (1947)
Madagascar and dependencies	229,438	4,450,000 (")
Réunion (Bourbon)	970	245,000 (")
America		
St. Pierre and Miquelon	93	4,854 (1945)
French Guiana	7,720	28,547 (1946)
Inini	27,020	5,024 (")
Guadeloupe and dependencies	686	335,000 (1947)
Martinique	427	265,000 (")
Asia		
French India	197	329,000 (1944)
State of Viêt-Nam	127,259	21,030,000 (1948)
Bac-Ky (Tongking)	44,672	9,851,000 (1943)
Nam-Ky (Cochin-China)	24,749	5,579,000 (1946)
Trung-Ky (Annam)	57,838	7,184,000 (1943)
Cambodia	53,668	3,227,000 (1946)
Laos	91,428	1,189,000 (")
Oceania		
French Pacific Settlements	1,545	56,000 (1947)
New Caledonia and dependencies	7,654	61,250 (")
New Hebrides	4,633	48,815 (1946)

10, 1946, resulted in a considerable gain for the Communists; they and their affiliated groups secured 182 seats, the Popular Republicans (MRP) and their affiliated groups, 166; Socialists, 102; others, 168.

The Cabinet formed July 11-13, 1950, contained 6 Popular Republicans, 5 Radicals, 5 Socialists and 5 Independents and minor-party members. Communists have been excluded from the government since April 30, 1947.

GOVERNMENT OF OVERSEAS TERRITORIES. The French constitution of 1946 provided for establishment of the French Union, consisting of the French Republic

(metropolitan France and the overseas departments, territories and trusteeships) and the associated territories and states. The overseas departments are Algeria (three departments), Martinique, Guadeloupe, French Guiana and Réunion.

The overseas departments and territories are represented in the National Assembly by 75 deputies and in the Council of the Republic by 65. In addition the constitution provided for creation of a high council, consisting of nominees of the French government and of the associated states, and an Assembly of the French Union, with power that is mainly advisory. The

Assembly, which met for the first time on Dec. 10, 1947, consists of 240 delegates, 120 of whom are elected by the French parliament, 75 by territorial assemblies overseas, and 45 by the associated states.

Article 61 of the constitution provides that the position within the Union of the associated states—tentatively described as French Morocco, Tunisia and the Federation of Indo-China—is "settled for each of them by the act which defines their relations with France." Thus far, both Morocco and Tunisia have declined to modify their protected status in favor of a closer bond with France. Việt-Nam, Laos, and Cambodia, in Indo-China, have become associated states.

DEFENSE. France's 1948-49 army comprised about 465,000 men recruited under a conscription system. Forces outside France included about 60,000 in Germany, 7,000 in Austria, several thousand in Madagascar, 100,000 in North Africa and 130,000 in Indo-China. Air force strength was estimated at 90,000 in 1949, and that of the navy at 60,000. On Dec. 31, 1949, the navy, still decimated by wartime losses and scuttings, had 2 battleships, one fleet carrier (formerly H.M.S. *Colossus*, 14,000 tons), one escort carrier, 11 cruisers, 12 submarines, 20 fleet destroyers, 24 escort destroyers and frigates, and several hundred minor craft.

EDUCATION. State elementary schools in 1948 numbered 70,014, with 3,735,657 students. There were also 11,003 private schools with 899,036 students. Secondary education for boys is provided in *lycées*, classical and modern schools maintained by the state (589 in 1947 with 256,820 students), communal colleges and free schools. Girl students enrolled in *lycées* and classical and modern schools numbered 170,188 in 390 institutions in 1947.

Higher education is provided chiefly in the universities, of which there are 17, with total enrollment of 129,025 in 1947-48. The University of Paris is largest, with an enrollment of more than 50,000.

RELIGION. The predominant faith is Roman Catholicism, but Church and State were separated in 1905. Diplomatic relations with the Vatican were resumed in 1921, and lesser church property was returned to diocesan associations in 1924.

POPULATION. The people are not homogeneous, varying from section to section. During the inter-bellum period, the population remained almost static, with an increase of only 72,133 from 1931 to 1936 and a decrease of 3.3 per cent from 1936 to 1946. The birth rate also fell sharply (1925: 19.6; 1936-38 annual average: 14.8), but the end of World War II saw an uptrend, with an estimated rate of 20.6 in 1946, 21.0 in 1947, 20.8 in 1948 and 20.7 in 1949.

In 1946, for the first time in 11 years, births (835,000) exceeded deaths (542,000). **AGRICULTURE.** The national economy of France is predominantly agricultural. Of the total area, approximately 40 per cent is ordinarily devoted to crops, 20 per cent to forests, 3 per cent to vines and two per cent to market and other gardening. The vast majority of holdings are small farms worked by the owners. France normally is almost self-sufficient in basic foodstuffs and leads the world in wine production.

Production of major crops in 1949, in metric tons (1948 final figures in parentheses) was estimated as follows: wheat, 8,082,000 (7,634,000); rye, 650,000 (638,000); barley, 1,412,000 (1,273,000); oats, 3,126,000 (3,380,000); and sugar beets, 6,688,000 (9,425,000).

Other important crops are potatoes, berries, fodder beets, fruits, hay, nuts and turnips. Silk culture once thrived in the lower Rhône valley, but production fell sharply between wars. Milk, butter and cheese are important as exports. Livestock in Oct., 1948, included 15,434,000 cattle, 7,510,000 sheep and 6,288,000 hogs. Wine production in 1949 was about 1,053,700,000 U. S. gallons.

INDUSTRY. Principal industrial areas are Paris, Artois, Lower Seine and Lyon; the textile industry is concentrated in the north. Leading manufactures are iron, steel, chemicals, textiles, automobiles, machinery and beet sugar. Industrial production in 1948 was estimated at 102 per cent of 1937 totals, and reached 112 per cent in 1949.

FRENCH INDUSTRIAL PRODUCTION

Monthly averages, 1948 and 1949,
in metric tons

Product	1948	1949
Pig iron and ferroalloys	547,000	696,000
Steel ingots and castings	604,000	759,000
Cement	448,000	537,000
Passenger cars	8,340*	15,640*
Cotton yarn	18,700	19,000
Cotton fabrics	12,600	12,900
Wool yarn	11,100	10,200
Rayon yarn	3,630	3,870
Electricity	2,297†	2,367†
Manufactured gas	210‡	204‡

* Units. † Millions of kwh. ‡ Millions of cu. m.

TRADE. Foreign trade statistics, in billions of francs, are as follows:

	1947	1948	1949
Exports	212.8	481.2	782.0
Imports	346.5	654.3	921.8

Exports in 1949 totaled 26,963,000 metric tons (1948: 18,553,000 tons); imports, 46,072,000 tons (1948: 41,839,000 tons). Prin-

cial suppliers in 1949 were the French Union (26 per cent), the U. S. (18 per cent), Germany (7 per cent), and Australia and Britain (each 4 per cent). The chief customers were the French Union (40 per cent), Britain (9 per cent), Belgium (6 per cent), and Germany, Australia and the Netherlands (each 4 per cent).

COMMUNICATIONS. The French merchant marine had 1,236 ships (100 tons and over) on June 30, 1949, with a gross tonnage of 3,070,398.

There are about 5,500 miles of navigable waterways, including canals, with a traffic of 28,899,000 metric tons in 1947. There are approximately 550 inland navigation ports, of which Paris, Rouen and Strasbourg each normally handle more than one million tons annually (Paris, more than ten million tons). Railway mileage in 1947 totaled 25,304. Railroads were merged in 1938 into the *Société Nationale des Chemins de Fer Français*, of which the government acquired controlling interest. Highway mileage in 1949 was 428,000, including 50,000 miles of national highways. Telephones totaled 2,232,536 on Jan. 1, 1949.

Air France, nationalized on Jan. 1, 1946, operates on a world-wide basis. In 1948 it carried 590,000 passengers and flew 23,610,000 miles.

FINANCE. France's postwar financial position has been extremely unstable. Recent data are as follows (in billions of francs):

	1948	1949*	1950*
Revenue	1,021	1,250	1,753
Expenditure	1,596	1,870	2,238

* Budget estimate.

On June 30, 1948, the internal debt was 2,264,734,000,000 fr.; and the external debt, 696,217,000,000 fr.

On Dec. 2, 1945, the Bank of France and four large private banks were nationalized, and commercial credit came under government supervision.

TOPOGRAPHY. With a maximum length of about 600 miles and a width of 550 miles, France is second in size to Russia among Europe's nations. Its coastline is about 1,950 miles. In the Alps near the Italian and Swiss borders is France's highest point—Mont Blanc, 15,781 feet. The forest-covered Vosges Mountains are in the northeast and the Pyrenees are along the Spanish border. Except for extreme northern France, which is part of the Flanders plain, the country may be described as four river basins and a plateau. Three of the streams flow west—the Seine into the English Channel, the Loire into the Atlantic, and the Garonne into the Bay of Biscay. The Rhône flows south into the Mediterranean. For about a hundred miles, the Rhine is France's eastern border. West of

the Rhône and northeast of the Garonne lies the Central Plateau, covering about 15 per cent of France's area, and rising to a maximum elevation of 6,188 feet. In the Mediterranean, 115 miles east-southeast of Nice, is Corsica, the island of Napoleon's birth, with an area of 3,367 square miles.

MINERALS. French coalfields, most extensive in the northeast, ordinarily supply about 70 per cent of domestic needs. Lorraine, Anjou and Normandy have valuable iron ore deposits. Provence has bauxite. Alsace has potash and oil. Limousin has kaolin, zinc, lead and tar.

MINERALS, 1938 and 1949 (in metric tons)

Mineral	1938	1949
Coal	46,502,000	53,032,000
Iron ore	33,062,400	31,800,000
Bauxite	684,960	788,000*
Lead ore	5,736	52,250†
Potash	581,000	768,900*

* 1948. † Smelter production.

FORESTS AND FISHERIES. France, with over 26,000,000 wooded acres, produces well over \$100,000,000 worth of forest products in a normal year, including resin, turpentine, timber and nuts. The annual fish catch (434,600 metric tons in 1948) is among the largest in Europe. Cod and sardines are usually the biggest items; others are coalfish, herring, whiting, mackerel, tunny, lobster, oysters, rays, flounder and sole.

CLIMATE. France's climate is temperate but varies from long cold winters and hot summers in the northeast, to the subtropical temperature of the Mediterranean coast with very mild winters. With no high western elevations to block moisture-laden winds from the Atlantic, all France has adequate rainfall of 20 to 30 inches a year. The mean annual temperature at Paris is 50.5° (36.5° in January and 65.5° in July). The rainiest months are June and October, with February usually the driest.

Andorra

This 191-square mile autonomous and semi-independent state on the Franco-Spanish border has been under the joint suzerainty of the French State and the Spanish bishops of Urgel since 1278. It is a cluster of mountain valleys inhabited by about 5,200 hardy and traditionally independent people whose principal pursuit is the tending of flocks. Catalán is the language spoken, and both French and Spanish currency are in use. Andorra is governed by a Council General of 24 members, elected for four years by the heads of families. A First Syndic, chosen by the Council, constitutes the supreme executive authority.

French Overseas Territories

AFRICA

Algeria (Part of Metropolitan France)

(L'Algérie)

Governor General: Edmond Naegelen.

Principal cities (est. 1947): Algiers, 360,700 (capital); Oran, 252,500 (seaport); Constantine, 121,200 (trading center); Bône, 82,400 (seaport; phosphates).

Monetary unit: French franc.

Languages: Arabic, French.

Religions: Mohammedan (natives), Roman Catholic, Jewish.

HISTORY. Algeria, more than three times the size of Texas and situated on the northern bulge of Africa, was of great strategic importance during World War II. After U. S. and British troops occupied it following the landings of Nov. 8, 1942, it became the headquarters of the provisional French government of General Charles de Gaulle until the summer of 1944. For many months during that period it was the headquarters of the Allied Expeditionary Force.

Algeria became a Roman colony after the fall of Carthage in 146 B.C. and was overrun by the Arabs in the 7th, 11th and 12th centuries. In the 13th century it became one of the three kingdoms founded on the ruins of the old Almohade Empire. Following a brief Spanish occupation, it went under Turkish suzerainty in 1518. For 300 years thereafter Algiers was the headquarters of the notorious Barbary pirates who preyed on Mediterranean shipping. The French ended Turkish rule by taking Algiers in 1830, but it was not until 1847 that they were able to suppress a holy war instigated in 1839 by Abd-el-Kader.

French policy for a time vacillated between complete assimilation of Algeria as part of France, and a decentralized administration under a governor general. In 1896 the idea of assimilation was abandoned for a number of years. After France fell in 1940, Algerian government officials were loyal to Vichy, but their control was ended by the Allied invasion of the African coast in 1942.

GOVERNMENT. In effect, Algeria is part of France. Its three departments are represented in the National Assembly by 15 deputies, and it is one of the ten military districts of France, with both French and natives subject to military service. The governor general is responsible to the Interior, rather than Colonial, Ministry in the French Cabinet. A statute enacted in Aug., 1947, gave Algeria an elected legislative assembly, but leadership of the government still remains with the governor general.

SOCIAL AND ECONOMIC CONDITIONS. Primary and secondary schools for Europeans are on French lines. Most natives do not go beyond the primary grades. The knowledge and use of French has spread widely among the natives, but the teaching of Arabic in all schools was made compulsory in 1946. There is a university at Algiers, with faculties of science, arts, law, medicine and pharmacy.

Approximately 86 per cent of the population is native, 12 per cent French and 2 per cent other European. The native population is Berber, with Arab admixture physically assimilated.

The area under cultivation is about 15,000,000 acres, more than 30 per cent of which is owned by European farmers, chiefly in the fertile coastlands. The principal crops are wheat, barley and oats. Algeria is a leading wine producer, with almost 7 per cent of the cultivated area devoted to vines. Production in 1949 was 381,900,000 U. S. gallons, about four-fifths of normal. Olive trees are widespread; the average annual yield of oil is about 2,500,000 gallons. Tobacco, corn, vegetables, flax, silk, figs and dates are also produced. Much of the area is more adapted to grazing than to agriculture. In 1948 there were 3,105,000 sheep, 2,240,000 goats, 699,000 cattle and 152,000 camels.

European industries include those dependent on crops, such as distilling and oil and flour milling, as well as the making of leather, tobacco and matches. There are also small native industries, particularly the traditional carpet weaving.

Exports in 1949 were valued at 88,709,200,000 fr. and imports at 127,821,000,000 fr. Chief exports were wine (49.6 per cent), citrus fruits (4.5 per cent), and iron ore (3.5 per cent). Chief imports were cotton textiles (6.1 per cent), petroleum and products (5.2 per cent), and automobiles and parts (5.1 per cent). France took 76 per cent of the exports and supplied 77 per cent of the imports.

Algeria has 3,396 miles of railway. A central line runs from the Moroccan to the Tunisian frontier with branches north to all the ports and south into the Southern Territories. There is an excellent network of roads of more than 30,000 miles, and motor transport is well developed, including regular passenger and freight lines across the Sahara. Only French ships may normally trade between France and Algeria.

Revenue (ordinary and extraordinary) was estimated at 52,546,631,000 fr. in 1949 and expenditure at 52,525,049,000 fr.

Algeria is a leading producer of phosphates (1949: 644,800 metric tons). Iron ore of good quality is found near the Tunisian frontier and on the Oran coast (1949: 2,536,900 tons). Zinc, lead and salt

are also important minerals; and small amounts of oil and coal are produced.

Forests, mostly scrub, cover about 7,600,-000 acres; cork is the leading product. Fish products include anchovies, sardines, shell-fish, spray and tuna.

TOPOGRAPHY AND CLIMATE. Algeria fronts on the Mediterranean for more than 700 miles. Northern Algeria extends inland for 185 to more than 200 miles. South of it are the big, economically unimportant Southern Territories. Low plains cover small areas near the coast, but 68 per cent of Algeria is a plateau between 2,625 and 5,250 feet above sea level. The region between the Sahara and the Mediterranean reaches a high point of 7,641 feet.

Most of the streams are periodic with the rains. The Chélif is the principal river, over 435 miles long. On the Saharan slopes, the oases or the hot sands absorb the streams as soon as they leave the mountain ridges.

Rainfall averages 20 to 40 inches on the coast, and decreases to virtually none in the Sahara. On the coast, temperatures average about 52° in winter, 77° in summer. Inland, the winter average is about 40° and summer about 81°, although the Sahara summer average is from 95° to 105°.

CAMEROON (FRENCH CAMEROONS)—Status: U. N. trust territory.

Capital: Yaoundé (population 50,000).

High Commissioner: Jean-Louis Soucaudaux.

Foreign trade (1949): exports, 6,661,000,-000 fr. C.F.A.*; imports, 8,387,100,000 fr. C.F.A. Chief exports: cacao, fresh bananas, palm kernels and oil.

Agricultural products: sweet potatoes, millet, cacao, bananas, palm kernels and oil.

Minerals: diamonds, gold, tin.

Forest product: timber.

* Colonies Françaises d'Afrique, equal to 2 metropolitan francs.

Cameroun is bounded principally by French Equatorial Africa, except for the Atlantic Ocean on the west, the British Cameroons on the northwest, and Río Muni on part of its southern boundary.

In 1884 the Cameroons became a German colony (Kamerun), and after the conclusion of World War I the region was divided as a League mandate between Britain and France, four-fifths of the area going to France. The new U. N. trusteeship area has political and financial autonomy under a French High Commissioner, responsible to the French government and to the administrative council of French Equatorial Africa. Cameroun joined the Free French movement in 1940. The chief port and commercial center is Douala; the administrative center, Yaoundé (pop. 50,-000) is located on the central plateau.

The climate is tropical and unhealthy

for Europeans; not even in the cool months does the temperature generally fall below 70°. Rainfall is heavy on the coast and is fairly evenly distributed through the year.

FRENCH EQUATORIAL AFRICA—Status: Colony.

Governor General: Bertrand Cornut-Gentile.

Capital: Brazzaville (population 83,579).

Foreign trade (1949): exports, 6,313,200,-000 fr. C.F.A.; imports, 11,309,600,000 fr. C.F.A. Chief exports: cotton (35%), timber, gold, diamonds, coffee, palm kernels.

Agricultural products: cotton (1949 exports: 23,612 metric tons), wool, palm kernels and oil, coffee.

Minerals: gold, diamonds, and lead.

Forest products: timber, rubber, copal gum, wax.

The colony lies in west central Africa, bordered on the west by the Atlantic, Cameroun, Nigeria and French West Africa; on the north by Libya; on the east by Anglo-Egyptian Sudan; and on the southeast and south by Belgian Congo. The coast, an early slaving center, was first settled by the French in 1839; French hegemony was subsequently extended by exploration and conquest of the native tribes. The territory declared for Free France following the armistice of June, 1940, and Brazzaville became capital of De Gaulle's Free French movement.

The governor general, responsible to the Minister for France Overseas in the French Cabinet administers the area as an administrative unit with the aid of an administrative council; each of the four territorial regions (Gabon [Gabun], Middle Congo, Ubangi-Shari, Chad) has a governor responsible to him. There were, in 1948, 13,320 Europeans; most of the Africans are Negroes. There are Arab and Fulani settlements in the Chad region, and several Moslem sultanates. Natural resources, both forest and mineral, are vast but relatively unexploited. The country's economic life depends primarily on the forest products. The colony is capable of exporting large quantities of hard okoumé wood, either in logs or in veneer form.

The climate is tropical—hot and humid—and the average temperature is about 80° (78° at Brazzaville), varying only slightly throughout the year. Rainfall averages about 60 inches annually, with no marked wet or dry seasons.

FRENCH MOROCCO: see MOROCCO

FRENCH SOMALILAND—Status: Colony.

Capital: Djibouti (population 22,000).

Governor: Numa Sadoul.

Foreign trade (1949): exports, 1,490,200,-000 fr. C.F.A.; imports, 1,940,200,000 fr. C.F.A. Chief exports: coffee, hides, salt.

Mineral: salt.

French Somaliland, at the southern en-

trance to the Red Sea, was acquired by France between 1883 and 1887 by treaties with the Somali sultans, although posts on the coast had been acquired in 1856. This small, largely arid and sparsely populated region is important chiefly because of the port of Djibouti, the main artery of Ethiopia's trade via the Djibouti-Addis Ababa railway. The colony is administered by a governor, responsible to the French government and assisted by an administrative council. It adhered to the Free French movement in December, 1942. In 1948 there were 2,500 Europeans, including 1,750 French.

French West Africa (Colony) (L'Afrique Occidentale Française)

Governor General: Paul Béchard.

Principal cities (est. 1948): Dakar, 185,000 (capital, chief port); St. Louis, 62,900.

Monetary unit: Franc C.F.A. (Colonies Françaises d'Afrique, equal to 2 metropolitan francs).

Languages: French, native tongues.

Religions: Mohammedan, Pagan.

HISTORY AND GOVERNMENT. The St. Louis Colony, founded in 1626 at the mouth of the Sénégal River, was probably the first permanent white settlement in French West Africa in which the French established themselves, largely for the purpose of pursuing the slave trade. Little progress inland was made until after 1854, when a scheme was conceived to link the upper Sénégal with the upper Niger. After 1876 the coast settlements were extended steadily into the interior through a series of missionary and economic campaigns. In 1895 the colony of French West Africa was formed under one governor general by the unification of its various components.

The governor general of the colony is appointed by the French government and is assisted by a legislative council and an elected assembly. Governors responsible to him administer the eight constituent colonies—Sénégal, French Guinea, the Ivory Coast, Dahomey, Haute Volta (re-established in 1947), French Sudan, Mauritania and Niger. Each of these has considerable autonomy, with the central colonial government supervising services common to all. The area is represented in the French National Assembly, the Council of the Republic, and the Assembly of the French Union.

SOCIAL AND ECONOMIC CONDITIONS. Attendance at elementary schools in 1948 was approximately 96,500. There were 80 higher primary schools with 7,200 students, and 18 secondary schools with 1,200 students. Private schools enrolled approximately 30,000.

No racial unity exists in French West Africa, and there is great variation of

physique, manner, custom and language. The population is native except for approximately 54,560 Europeans (1948). Non-Negroid tribes include the Saharans, Moors, Tuaregs and Fulbé. About half the population normally is Mohammedan, but a number of tribes have remained spirit worshippers.

Agriculture has expanded rapidly in recent years. Millet, rice and maize are the principal food crops, and vegetable oils are a leading commercial product. Peanuts, the chief export crop (1948: 600,000 metric tons) are cultivated in Sénégal, and palm kernels and oil are produced in Dahomey and the Ivory Coast. Other products are coffee, cotton, cacao and bananas. Stock raising is important in French Sudan and Mauritania, relatively dry districts in the northern part of the colony. Manufacturing is undeveloped except for small native industries. Expansion is hindered by limited power facilities.

Imports in 1949 totaled 34,479,700,000 fr. C.F.A., including cotton textiles, machinery, vehicles and metal products. Sénégal and the Ivory Coast account for over half the exports, which totaled 27,400,700,000 fr. C.F.A. in 1949 and included peanuts (24%), peanut oil, coffee and cacao. France took 78 per cent of the exports and supplied 68 per cent of the imports.

The middle Niger and lower Sénégal Rivers are navigable, but French West Africa's railways (1946: 2,705 mi.) are more important as interior communications. Dakar, with the best harbor on the west African coast, is the principal port and also an important stop on international air routes between South America and Europe. There are several other good ports.

The estimated budget for 1948 balanced at 13,427,000,000 fr., over a third of which was the total local budget of the eight component colonies.

Gold, found in alluvial deposits in Sénégal and in veins in the Ivory Coast, and diamonds are the only important minerals. (Production of gold, however, has dropped sharply in recent years). Timber and precious woods are important, especially in the Ivory Coast. Forest products include timber, mahogany logs, gum arabic, shea butter (a solid, white fat obtained from the seeds of the shea tree) and nuts, kapok and beeswax.

TOPOGRAPHY AND CLIMATE. The colony, comprising a sixth of Africa, is half as big as Europe; it is generally a plateau broken by two mountain ranges. The Futa Jallon, from 2,300 to 4,900 feet in elevation, parallels the coast for about 430 miles, and Mount Nimba, on the Liberian border, rises 5,260 feet. There are also mountainous regions in the Sahara districts to the north. The Niger, 2,600 miles long, is the principal river.

The central and northern parts of the colony have two seasons, rainy and dry. In the southernmost regions there are two rainy seasons, separated by a short dry season. Average annual rainfall at St. Louis is 16.7 inches; at Dakar, 20.2 inches. Temperatures on the west coast average about 70° in winter and 82° in summer, with daily variation of about 20°.

MADAGASCAR AND DEPENDENCIES—Status: Colony.

Capital: Tananarive (Antananarivo) (est. pop. 1947: 165,477).

Governor General: Robert BARGUES.

Foreign trade (1949): exports, 7,369,500,-000 fr. C.F.A. (80% to France); imports, 11,789,400,000 fr. C.F.A. (74% from France). Chief exports: coffee (23%), meats (18%), skins (11%).

Agricultural products (1948): rice (714,425 metric tons), sugar cane (318,460 tons), coffee (18,080 tons), vanilla, manioc, bananas, maize, coconuts.

Minerals: graphite (1949 exports: 9,140 metric tons), mica, phosphates, gold.

Forest products: gum, medicinal plants, rubber, tannins, dyewoods.

Madagascar, lying off the southeast coast of Africa, is the fourth largest island in the world, with a length of 995 miles and an average width of 250 miles. It remained independent under native rulers until 1885, when it came under French protection. French troops conquered the island in 1895 and it became a French colony the following year. The last native ruler, Queen RANAVALONA III, was exiled.

British troops landed on the island May 5, 1942, during World War II, and an armistice with Vichy French forces was signed November 5, 1942. The island is administered by a governor general responsible to the Minister for France Overseas in Paris, assisted by a General Assembly. Native nationalist outbreaks occurred in 1947, and French troops maintained order with difficulty.

The chief occupations are cattle raising (1948: 5,603,000 cattle) and agriculture; there are several food-processing and textile plants. The chief port is Tamatave on the east coast; the capital, Tananarive, is located on the central plateau. In 1948 there were 54,378 French and other non-native residents, including Hindus, Arabs and other Asiatics. The natives, collectively known as Malagasy, are divided into several tribes. Outlying dependencies include the islands of Europa, Juan da Nova, Bassas da India and Glorieuses.

The Comoro Islands (800 sq. mi.), formerly a dependency, became an autonomous territory in 1946.

The climate of Madagascar is generally tropical, with a warm and wet season from November to April and a cool, dry season the rest of the year. Temperatures vary

between 55.5° and 95° (at Tamatave, 80° in February, 68° in July).

RÉUNION (Bourbon)—Status: Département of Metropolitan France.

Capital: St. Denis (population: 36,096).

Prefect: Roland BECHOFF.

Foreign trade (1949): exports, 3,020,500,-000 fr. C.F.A.; imports, 3,499,500,000 fr. C.F.A. Chief exports: sugar, essential oils (geranium oil, oil of vetiver, oil of flang-flang), rum.

Agricultural products: sugar, vanilla, coffee, maize.

Discovered by Portuguese navigators in the 16th century, the island, then uninhabited, was taken as a French possession in 1638. It is located about 450 miles east of Madagascar, in the Indian Ocean.

There is no indigenous population. About three-quarters of the inhabitants are of European origin; the remainder are Creoles, mulattoes, Negroes, Indians and other Asiatics. Tropical cyclones of hurricane variety are frequent during the change of seasons. Occasionally a *raz de marée* (tidal wave) does great damage. Sugar-cane cultivation and the production of rum are the principal occupations.

TOGO—Status: U. N. trust territory.

Capital: Lomé (population 30,063).

Commissioner: Jean CÉDILE.

Foreign trade (1949): exports, 844,744,000 fr. C.F.A.; imports, 1,454,400,000 fr. C.F.A. Chief exports: cacao, palm kernels, coffee, copra.

Agricultural products: cacao, palm kernels and oil, cotton, copra, coffee.

Mineral: iron ore.

Forest products: dyewoods, oil palms.

Togo, a part of the former Slave Coast, lies between the British Gold Coast colony and French West Africa. Established as a German colony in 1884, the area was divided as a League mandate by France and Britain at the end of World War I, with France obtaining two-thirds of the total area. It was placed under U. N. trusteeship in Dec., 1946.

Togo is administered by a commissioner responsible to the French government, assisted by an economic and financial council composed of officials, merchants and nine elected native delegates. Agriculture and grazing are the chief industries. In 1948, there were 1,082 Europeans. The coastline, only 32 miles long, is low, sandy and without harbors.

The coastland climate is hot, humid and unhealthy, with wet seasons lasting from March to June and from September to November.

Tunisia (Protectorate)

Ruler (Bey): Sidi Mohammed al-Amin.

French Resident General: Louis PERILLIER.

Prime Minister: Mustapha SAAK.

Principal cities (census 1946): Tunis,

364,593 (capital); Sfax, 54,637 (phosphate port); Bizerte, 39,327 (seaport and naval base); Sousse, 36,566 (seaport).

Monetary unit: French franc.

Languages: Arabic, French, Italian.

Religion: Predominantly Mohammedan.

HISTORY. Tunisia was settled by the Phoenicians and Carthaginians in ancient times. Except for an interval of Vandal conquest in A.D. 439-533, it was part of the Roman Empire until the Arab conquest of 648-69. Then it was ruled by various Arab and Berber dynasties until the Turks took it in 1670-74. The founder of the present dynasty, Hussein ben 'Ali, was proclaimed sovereign by the occupation troops in 1705 and later succeeded in making the office hereditary, although subject to nominal Turkish sovereignty.

Throughout much of its history, Tunisia was essentially a pirate state, preying on Mediterranean shipping. In modern times, Italy became predominant economically in the area, but after French troops occupied the area in 1881, the Bey signed a treaty acknowledging a French protectorate.

Following the Allied landings in North Africa in 1942, Tunisia became a battleground with the Axis forces pinched between the British 8th Army advancing from Libya and the U. S., British and French forces from Algeria. The Axis units surrendered in May, 1943, and Tunisia was turned over to the De Gaulle government. On May 15, 1943, the reigning Bey, Sidi Mohammed al-Mounsaf, was removed and replaced by his cousin, the present ruler.

Fanned by Arab nationalist agitation elsewhere, the Tunisian nationalist party, *Destour*, although banned by the French, has intensified its activity in recent years. Its aim is the complete independence of Tunisia and its adherence to the Arab League.

GOVERNMENT. Although the Bey is theoretically sovereign, a French resident general actually controls all military and civil affairs, assisted by a cabinet. Local administration is conducted by native officials under the close supervision of the French. The Southern Territory is subject to military administration.

SOCIAL AND ECONOMIC CONDITIONS. In 1947, Tunisia's 589 public and 104 private schools had 154,303 pupils, about a third of them French and Italian. The Great Mosque at Tunis is a Moslem University.

Tunisia's population (by the 1946 census, 87.4 per cent Arab) is concentrated in the cities and on the coast. There are about 100,000 nomads.

Agriculture is the chief industry. Over a quarter of the arable land is in wheat (1949: 547,000 metric tons). Other impor-

tant crops are barley, oats, corn, sorghum, beans and peas. Average annual wine production is about 38,000,000 gallons (1949: 21,900,000). Average annual olive oil production is about 45,000 metric tons (1949: 77,000 tons). The Cape Bon region is largely devoted to citrus fruits, the southern oases to dates. In 1948 there were 1,588,000 sheep, 1,083,000 goats, 341,000 cattle and 177,000 camels. More than 50,000 sheep and 4,000 tons of wool a year are usually exported.

Leading industries include flour milling, oil refining, lead smelting and distilling. Native industries include the spinning and weaving of wool, and the making of pottery and leather goods.

Tunisia, Algeria and France are under a single customs union for a number of products. Exports in 1949 were valued at 27,237,100,000 fr., of which 47 per cent went to France. They included phosphates (14 per cent), olive oil (11 per cent), wheat (9 per cent) and wine (7 per cent). Imports were valued at 40,297,900,000 fr., of which 73 per cent came from France. The leading items were machines and metal products (12 per cent), cotton textiles (9 per cent), refined sugar (7 per cent) and petroleum and products (6 per cent).

There were 5,408 miles of roads and 1,351 miles of railway in 1949. Tunis, Bizerte, Sousse and Sfax are the principal ports.

The 1949 budget balanced at 16,343,000,000 fr. State monopolies, including tobacco, provide about 25 per cent of the revenue and indirect taxes about half.

Tunisia's extremely rich deposits of phosphates are mined principally in the Gafsa and Kef regions. Production in 1949 was 1,441,900 metric tons. The iron ore is of good quality (1949: 678,600 tons). Other minerals are lead (1949: 39,100 tons), zinc, mercury, manganese, copper, salt and poor-grade lignite.

Products derived from Tunisia's 2,500,000 acres of forests include lumber, mine props and cork. Alfa is exported, mainly to England, for making of paper pulp. About 20,000 Tunisians work at fishing; the catch averages 8,000 tons of fish and 95 tons of sponges annually.

TOPOGRAPHY AND CLIMATE. Tunisia, at the northernmost bulge of Africa, thrusts out toward Sicily to mark the division between the eastern and western Mediterranean. It is mountainous in the north, covered by plains in the east, and projects southward to the Sahara area. Its principal river, the Medjerda, in the north, is 228 miles long. The climate is Mediterranean with mean temperature extremes at Tunis of 52.7° and 79.2°. Annual rainfall ranges from 24 inches in the north to less than five inches in the south.

WESTERN HEMISPHERE

FRENCH GUIANA (including ININI)—Status: Département of Metropolitan France.

Capital: Cayenne (population 10,961).

Prefect: Robert Vignon.

Foreign trade (1949): exports, 219,300,-000 fr.; imports, 1,031,300,000 fr. Chief export: gold (71%).

Agricultural products: bananas, cacao, corn, manioc, rice, sugar cane.

Mineral: gold (1949: 15,017 troy oz.).

French Guiana, lying north of Brazil and east of Surinam (Dutch Guiana) on the northeast coast of South America, was first settled in 1626. Penal settlements, embracing the area around the mouth of the Maroni River and the Iles du Salut (including Devil's Island), were founded in 1852; they are now being disbanded.

During World War II French Guiana at first adhered to the Vichy government, but the Free French took over in March, 1943. The large and scantily populated territory of Inini in the hinterland is administered separately. Economic development is extremely backward; transportation is almost entirely by water, conditions are unsanitary and large quantities of foodstuffs must be imported. Gold is the chief export.

January temperatures average 79°, September and October temperatures 82°. Rainfall is heavy.

GUADALOUPE—Status: Département of Metropolitan France.

Capital: Basse-Terre (population 13,-638).

Prefect: Gilbert Phillipson.

Foreign trade (1949): exports, 6,842,400,-000 fr.; imports, 6,986,600,000 fr. Chief exports: sugar (46%), rum, bananas.

Agricultural products (1948): sugar (35,-000 metric tons), bananas (78,000 tons), coffee, cacao, manioc, vanilla, tobacco.

Guadeloupe, lying in the West Indies about 300 miles southeast of Puerto Rico, was discovered by Columbus in 1493. French colonization began in 1635. It consists of two large islands, separated by a narrow arm of the sea, and several outlying smaller islands. Most of the population is Negro and mulatto. The largest city and chief port is Pointe-à-Pitre (population 44,551). About half the cultivated area is devoted to sugar cane. The manufacturing of rum and spirits is the principal industry. Mean annual temperature is 78°.

MARTINIQUE—Status: Département of Metropolitan France.

Capital: Fort-de-France (population 64,-525).

Prefect: Christian Laignet.

Foreign trade (1949): exports, 5,185,000,-000 fr.; imports, 8,533,200,000 fr. Chief exports: rum (51%), sugar, bananas.

Agricultural products: sugar (1948: 24,-000 metric tons), bananas, pineapples, cacao, coffee.

Manufactures: rum, sugar.

Martinique, lying in the Lesser Antilles about 300 miles northeast of Venezuela, was probably discovered by Columbus in 1502 and was taken for France in 1635. Following the Franco-German armistice of 1940 it had a semi-autonomous status under the High Commissioner, Admiral Georges Robert, until 1943, when he relinquished his authority to the Free French. The colony, administered by a governor assisted by an elected council, is represented in the French legislature. The population is mainly Negro and mulatto. Most of the arable land is devoted to sugar cultivation. Fort-de-France, the capital and chief commercial center, has an excellent harbor. Mean annual temperature of the coast region is 80° (77° in January, 83° in June).

ST. PIERRE AND MIQUELON—Status: Colony.

Capital: St. Pierre.

Administrator: Jean Moisset.

Foreign trade (1949): exports, 359,900,000 fr.; imports, 330,700,000 fr. Chief export: cod and other fish products.

The sole remnant of the French colonial empire in North America, these islands were first occupied by the French in 1660. Their only importance arises from proximity to the Grand Banks (10 mi. south of Newfoundland) making them the center of the French Atlantic cod fisheries.

ASIA

FRENCH INDIA—Status: Colony.

Capital: Pondichéry (population 53,101).

Commissioner: André Ménard.

Chief exports: peanuts, cotton textiles.

Agricultural products: peanuts, manioc, rice, onions.

French India is a collective name for the scattered French possessions in India—on the Coromandel coast are Pondichéry, Karaikal and Yanam; on the Malabar coast, Mahé. The chief possession is Pondichéry, founded by the French in 1674. The governor, responsible to the Minister for France Overseas in Paris, is assisted by a representative assembly. More than 90 per cent of the population of French India is Hindu.

Chandernagor, in Bengal, formerly part of French India, was transferred to India on May 2, 1950, in accordance with a popular referendum. The future status of the remainder of the colony is also to be determined by referendum.

Indo-Chinese Federation

High Commissioner: Léon Pignon.

Ruler, Viêt-Nam: Bao Dai.

King, Cambodia: Norodom Sihanouk.

King, Laos: Sisavang Vong.

Principal cities (est. 1949): Saigon, (including port of Cholon), 256,000 (capital, Viêt-Nam); Hanoi, 160,000 (commercial center, Viêt-Nam); Pnom-Penh, 128,950

(capital, Cambodia); Haiphong, 92,000 (seaport, Viêt-Nam).

Monetary unit: Piaster.

Languages: Annamese, Cambodian, French.

Religions: Buddhism, Christianity (4%).

HISTORY AND GOVERNMENT. The Indo-Chinese Federation (French Indo-China), at the southeast corner of Asia, first met the West in the 16th century, when Portuguese traders and missionaries arrived. French influence dates from 1787, and in the 19th century France received preferential treatment for helping the emperor of Annam recover his throne. During the last half of the century, France gradually extended influence over the whole.

After France fell in 1940, Vichy authorized the entry of Japanese troops, and the country became one of the springboards for the Japanese campaign against Singapore. When, in March, 1945, the Japanese seized control of the whole country, Annam and Cambodia declared their independence. After the Japanese surrender, British and Chinese troops occupied Indo-China in the face of a growing nationalist movement, and restored order for the French authorities, who assumed control officially on March 4, 1946.

Until the beginning of World War II, Indo-China was an administrative federation of one colony—Cochin-China; four protectorates—Annam, Tongking, Cambodia and Laos; and a special territory—Kwangchowan (returned to China in 1945). These had various degrees of native rule, but the real administrator of each unit was the French chief resident.

Early in 1945, France announced its intention of organizing the area into five states constituting a federal union, with the components enjoying limited self-government under a French governor general and the Federation a component part of the French Union. France was not able, however, to carry out this plan in its entirety, largely because of difficulties which it encountered in Viêt-Nam.

The Republic of Viêt-Nam—comprising Tongking and the northern part of Annam—had been recognized on March 6, 1946, as a free state within the Indo-Chinese Federation and the French Union. Viêt-Nam leaders, however, headed by Dr. Ho Chi Minh, a Communist, demanded a greater measure of autonomy and cession of the rich rice area of Cochin-China as well as southern Annam. The French steadfastly refused to accede to these demands, and fighting resumed on Dec. 19, 1946.

In the spring and summer of 1947, reinforced French troops won control over most important points in Viêt-Nam, but in mid-1950 guerrilla forces still had not been cleared from back areas. On June 5, 1948, a new government uniting pro-French groups in Annam, Tongking and Cochin-

China was set up, and a treaty signed that day recognized the unity of the new state within the French Union.

An agreement to implement the treaty, signed at Paris March 8, 1949, and effective June 14, gave Viêt-Nam full internal sovereignty and limited diplomatic representation abroad. In April, 1949, the newly elected assembly of Cochin-China voted to exercise its option of joining the new state. On June 14, Bao Dai, former emperor of Annam, proclaimed himself head of the new state with French approval.

Similar agreements in respect to Laos and Cambodia were concluded on July 19 and Nov. 8, 1949, respectively.

Indo-China is thus made up of the states of Viêt-Nam, Laos, and Cambodia, each an independent and self-governing state within the French Union. The Union is represented in Indo-China by a high commissioner who coordinates services common to the three states, such as the fiscal, immigration and customs services. The high commissioner is represented in each state by a commissioner.

SOCIAL AND ECONOMIC CONDITIONS. Viêt-Nam, consisting primarily of the densely populated eastern and southeastern coastal areas, contains about 85 per cent of the population of Indo-China. The majority of its population is Annamese and speaks the Annamese language. The kingdom of Cambodia, in the southwest, contains part of the Mékong river delta and is populated largely by Cambodians, who speak their own language. Laos, in the west and northwest, is sparsely populated by the Laotians and 3 ethnical minorities who belong to the Thai, Indonesian and Chinese races.

Rice, grown on five-sixths of the cultivated land, employs and feeds most of the population, and is normally the leading export and chief source of wealth. Production, centered in Cochin-China, ordinarily averages up to 4,500,000 tons annually (1949: 4,600,000 metric tons). Other crops include maize, sugar, cotton, tobacco, tea, coffee, peanuts, sweet potatoes and beans.

Indo-China is largely an exporter of raw materials. Its factories are small and process goods for local consumption or agricultural and forest products for export. Most important are the rice and saw mills. There are also cotton and silk textile factories, sugar refineries, match, cement and paper factories.

Viêt-Nam, Cambodia and Laos make up a single customs union. Exports in 1949 were 19,303,500,000 fr.; imports, 66,825,300,000 fr. Chief exports were rubber (31 per cent), rice (26 per cent) and dried vegetables (5 per cent). Principal customers were France (49 per cent), French Union (14 per cent) and Singapore (10 per cent).

Indo-China has several thousand miles of rivers and canals, including the Mékong

River, which is navigable for two-thirds of its course. There are about 2,000 miles of railways. An excellent highway system includes 5,563 miles of improved road, and 11,477 miles of local road. Unreplaced bridges, wartime attrition and guerrilla activity still hamper traffic.

Mining is most developed in Tongking. Output of coal in 1949 was 382,800 metric tons. Iron ore, tin, zinc, tungsten, gold, phosphates, manganese, bauxite and lead are also mined.

Forests cover 76,570,000 acres of Indo-China. The high mountain ranges of the north supply valuable tropical hardwood, bamboo, lacs and vegetable oil. Laos has rich teak forests. Rubber production in 1949 was 43,224 metric tons, about one-half the prewar output. The industry centers in Cochín-China. Fishing provides a major staple food to go with rice.

TOPOGRAPHY AND CLIMATE. Extending about a thousand miles from north to south, Indo-China has two great delta regions—the Mékong in the south and the Song Koi in the north. These are separated by the Annam Mountains, and to the west of them are the mountainous continental regions of Laos. The climate is monsoonal, with nearly all of the very heavy rainfall between May and October; April and May are the hottest months (86° to 93.2°). Laos, in the interior, is cooler and drier than most of Indo-China.

OCEANIA

FRENCH PACIFIC SETTLEMENTS—Status: Colony.

Governor: Armand Anziani.

Capital: Papeete, on Tahiti (population 1946: 12,428).

Foreign trade (1949): exports, 472,260,-000 fr. C.F.P.*; imports, 589,600,000 fr. C.F.P. **Chief exports:** copra, phosphate, vanilla.

Agricultural products: coconuts, sugar, vanilla, tobacco.

Mineral: phosphate (exports 1949: 239,-532 metric tons).

* Colonies Françaises du Pacifique, equal to 5¼ metro-politan francs.

The term French Pacific Settlements is applied to the scattered French possessions in the eastern Pacific—Mangareva (Gambier), Makatea, Marquesas Islands, Rapa, Rurutu, Rimatara, Society Islands, Tuamotu Archipelago, Tubuai and Raiavavae—which were organized into a single colony in 1903. The appointed governor is assisted by an administrative council. The principal and most populous island—Tahiti, in the Society group (pop. 1946: 24,820)—was claimed as French in 1768. Plebiscites conducted in September, 1940, gave support to the Free French movement of Gen. de Gaulle. The natives are mostly Polynesians. The climate of Tahiti is hot and humid, but not unhealthful. There is no clear division of seasons.

NEW CALEDONIA AND DEPENDENCIES
Status: Colony.

Capital: Nouméa (population 16,000).

Governor: Pierre Cournarie (also French Commissioner General in the Pacific).

Foreign trade (1949): exports, 426,100,-000 fr. C.F.P.; imports, 711,300,000 fr. C.F.P. **Chief exports:** nickel, chrome ore, coffee, copra, shells.

Agricultural products: coffee, copra, corn, cotton, manioc, rice, tobacco.

Minerals (1948): nickel (6,300 metric tons, matte); chromite (75,000 tons).

Sea product: mother-of-pearl.

New Caledonia (6,533 sq. mi.), lying about 1,070 miles northeast of Sydney, Australia, was discovered by Captain James Cook in 1774 and annexed by France in 1853. The government, in the hands of an appointed governor and an elective council, also administers the Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Chesterfield Islands, Walpole, the Huon Islands, Futuna and Alofi, with a total area of 1,121 square miles. The colony—taken over in the summer of 1940 by the Free French after a bloodless revolution—is one of the richest of the Pacific islands in mineral resources, particularly nickel and chrome ore. The natives are Melanesians; about one-third of the population is white and one-fifth Indo-Chinese and Javanese. A French penal colony was established in the 19th century. Average temperature on New Caledonia varies between 65° and 72°.

NEW HEBRIDES—Status: Anglo-French condominium.

Capital: Vila (population 1,200).

Foreign trade (1947): exports, £988,403; imports, £400,512. **Chief exports:** copra, cacao.

Agricultural products: coconuts, cacao, coffee.

Sea products: trochus and burghaus shell.

The New Hebrides, under joint Anglo-French administration since 1914, lie northeast of New Caledonia. The islands, about 40 in number, joined the Free French movement after a plebiscite in July, 1940. Most of the natives are Melanesians of mixed blood; there were 245 British and 667 French in 1947. The largest island is Espiritu Santo (875 sq. mi.). The French and British high commissioners in the Pacific are represented by resident commissioners.

Germany

HISTORY. Germany, utterly defeated in World War II, was partitioned into four separate zones, and although the Allies in 1945 had declared their intention of treating the country as an economic whole, it seemed evident five years later that in-

stead of being united soon, Germany would remain divided into two parts, one controlled by the western powers and the other by the U.S.S.R.

In the days of Julius Caesar the territory that is now Germany was inhabited by barbarous tribes that came originally perhaps from Central Asia. One of these Germanic tribes, the Franks, attained supremacy in western Europe under Charlemagne, who was crowned Holy Roman Emperor in A.D. 800. By the Treaty of Verdun (843), Charlemagne's lands east of the Rhine were ceded to the German prince Louis. Additional territory acquired by the Treaty of Mersen (870) gave Germany approximately the area she maintained throughout the Middle Ages. For several centuries after Otto the Great was crowned king in 936, the German rulers were also usually heads of the Holy Roman Empire.

Relations between State and Church were changed by the Reformation, which began with Martin Luther's 95 theses, and came to a head in 1547, when Charles V scattered the forces of the Protestant League at Mühlberg. Freedom of worship was obtained by the Peace of Augsburg (1555), but a Counter Reformation took place later, and a dispute over the succession to the Bohemian throne brought on the Thirty Years' War (1618-48) which devastated Germany and left the empire divided into hundreds of small principalities virtually independent of the emperor. Meanwhile, Prussia was developing into a province of considerable strength. Frederick the Great (1740-86) reorganized the Prussian army and defeated Maria Theresa of Austria in a struggle over Silesia. The conflict with revolutionary France hastened the disintegration of the empire, and in 1806 Francis II of Austria laid down the Imperial German crown. After the defeat of Napoleon at Waterloo (1815), the struggle between Austria and Prussia for supremacy in Germany continued, reaching its climax in the defeat of Austria in the Seven Weeks' War (1866) and the formation of the Prussian-dominated North German Confederation (1867).

At the close of the victorious war with France (1870-71), William I, King of Prussia, was crowned Emperor of Germany (Jan. 18, 1871). Under the guidance of the Imperial Chancellor, Prince Bismarck, Germany took a new place in world affairs, at the same time expanding her foreign trade and home industry rapidly. The Triple Alliance was formed with Austria and Italy in 1882. However, upon the accession of William II (1888-1918), Bismarck was dismissed and Russia was alienated. International rivalry was intensified in the early years of the 20th century, culminating in World War I, in which Germany, supporting Austria-Hungary's demands on

Serbia, suffered final defeat. By the terms of the Treaty of Versailles (1919) Germany lost about 27,000 square miles of territory, including all her colonies, plus Alsace-Lorraine, northern Schleswig, Eupen-Malmédy, Upper Silesia, and considerable areas in the east. William II had abdicated (Nov. 9, 1918), and a federal republic was organized under the constitution adopted at Weimar in 1919. The constitution was attacked by both the Right and Left; several Communist uprisings took place in the early 1920's, and in 1923 Adolf Hitler's abortive putsch was defeated. Germany's inability to fulfill the heavy reparations demands stipulated by the Treaty of Versailles led to French occupation of the Ruhr (1923-25). National bankruptcy was avoided by adoption of the Dawes Plan (1924) and later, the Young Plan.

The chancellorship of Brüning, leader of the Catholic Center party (1930-32), saw increasing economic and financial distress and the practical cessation of reparations payments. Hitler's rising National Socialist party won a plurality in both the July and November Reichstag elections in 1932, but not until the failure of Franz von Papen and Kurt von Schleicher to form governments did President Hindenburg name Hitler chancellor (Jan. 30, 1933). With the death of Hindenburg in 1934, Hitler became complete master of Germany, which he rapidly converted into a totalitarian state under the aegis of the Nazi party. All other political parties were banned, and the Jews were subjected to severe persecution. Through his foreign policy, Hitler repudiated the Treaty of Versailles and began full-scale rearmament. In 1935 he withdrew from the League of Nations and in 1936 he reoccupied the Rhineland and signed the anti-Comintern pact with Japan, at the same time strengthening relations with Italy. Austria was annexed in March, 1938. By the Munich agreement (Sept., 1938) he gained the Czech Sudetenland, and in violation of this agreement he completed the dismemberment of Czechoslovakia in March, 1939. But his invasion of Poland on Sept. 1, 1939, precipitated British and French declarations of war.

On May 8, 1945, Germany surrendered unconditionally to Allied and Soviet military commanders, and on June 5 the four-nation Allied Control Council became the *de facto* government of Germany.

At the Berlin (or Potsdam) Conference (July 17-Aug. 2, 1945) President Truman, Stalin and Prime Minister Attlee set forth the principles by which the Allied Control Council was to be guided. They were: Germany's complete disarmament and demilitarization; destruction of its war potential; rigid control of industry; decentralization of the political and economic structure.

Pending final determination of territorial questions at a peace conference, the three victors agreed in principle to the ultimate transfer of the city of Königsberg (now Kaliningrad) and its adjacent area to the Soviet Union and to the administration by Poland of former German territories lying generally east of the Oder-Neisse line.

For purposes of control, Germany was divided in 1945 into four national occupation zones, each headed by a military governor, assisted by appropriate supervisory and operating staffs.

Efforts to unify Germany were totally unsuccessful, and the western powers were unable to agree with the U.S.S.R. on any fundamental issue. Work of the Allied Control Council was hamstrung by repeated Soviet vetoes; and finally, on March 20, 1948, the U.S.S.R. walked out of the Council. Meanwhile, the U. S. and Britain had taken steps to merge their zones economically (Bizone); and on May 31, 1948, the U. S., Britain, France and the Benelux countries agreed to set up a German state comprising the three western zones. At the same time the western powers introduced a new German currency.

The Soviet Union replied to these measures by clamping a blockade on all ground communications between the western zones and Berlin. The western Allies, refusing to be driven out of the capital, immediately organized a gigantic airlift to fly supplies into the beleaguered city. The results were spectacular, and each month saw new flight and cargo records established. Before the Russians were finally forced to lift the blockade on May 12, 1949, 60,000 men were engaged in the airlift, at a cost of more than \$150,000,000 for the U. S. and \$50,000,000 for Britain.

In return for lifting the blockade, the U.S.S.R. asked only that the Big Four foreign ministers meet again to discuss German unification. The conference, meeting in Paris from May 23 to June 20, 1949, ended as usual in a deadlock on questions relating to Germany, although it did make seeming progress toward agreement on a peace treaty for Austria.

German Federal Republic

Area: 94,634 square miles.

Population (census 1946): 44,522,900 (predominantly German).

Density per square mile: 470.5.

Allied High Commission: John J. McCloy (U.S.A.); Sir Ivone Kirkpatrick (United Kingdom); André François-Poncet (France).

President: Theodor Heuss.

Chancellor: Konrad Adenauer.

Principal cities (census 1946): Hamburg, 1,406,158 (chief port); Munich, 738,018 (Bavarian capital); Essen, 520,592 (steel

works); Cologne, 489,812 (transportation center); Frankfurt am Main, 389,097 (manufacturing).

Monetary unit: Deutschemark (Dm.).
Language: German.

The German Federal Republic came into formal existence on Sept. 21, 1949, when the Allied High Commission turned over to it the administration of the U. S., British and French zones of occupation of Germany. Its creation marked the culmination of the Anglo-U. S.-French policy of progressively handing back to Germany its sovereignty and of modifying and reducing the restrictions and limitations on its industry. Preliminary steps reflecting this policy were: (1) the Anglo-U. S. agreement which took effect Jan. 1, 1947, providing that the U. S. and British zones should be treated as a single area for all economic purposes; and (2) the promulgation on Feb. 9, 1948, of a new bizonal charter providing for an economic council of 104 members to control all economic affairs in the U. S. and British zones.

On April 8, 1949, the Allied governments approved the terms of the Occupation Statute defining the basis for the merger of the U. S., British and French zones. On May 8, the German constituent assembly at Bonn approved a Basic Law or constitution for western Germany; it came into force on May 23, after approval by the *Landtage* of the 11 constituent *Länder*. Parliamentary elections were held on Aug. 14; and on Sept. 12, Free Democratic leader Theodor Heuss was elected president of western Germany. On Sept. 15, the *Bundestag* confirmed his appointment of Konrad Adenauer, leader of the Christian Democratic party, as chancellor. Bonn was selected as the federal capital on Nov. 3.

GOVERNMENT. Supreme authority is vested in the governments of the U. S., United Kingdom and France and is exercised through the Allied High Commission, headed by three high commissioners, one being designated by each of the governments. The powers of the Commission are defined in the Occupation Statute which took effect Sept. 21, 1949. Subject to the provisions of the statute, the republic and the participating *Länder* have full legislative, executive and judicial powers in accordance with the Basic Law and their respective constitutions. Any law of the republic is, however, subject to veto by the Commission within 21 days after receipt. The principal powers reserved to the Commission are those of foreign policy, disarmament and demilitarization, Ruhr control, reparations, decartelization, and security of Allied occupation forces.

The Basic Law or constitution of the republic provides for a federal form of government headed by a president elected every 5 years by a federal convention. The

parliament consists of a *Bundestag* whose members are elected every 4 years by popular vote and a *Bundesrat* whose members are appointed by the *Länder* governments. Actual executive power is in the hands of the cabinet, answerable to the *Bundestag* and headed by a chancellor appointed by the president, subject to the right of the *Bundestag* to elect a chancellor of its own preference. Provision was made for the accession of *Länder* in the Soviet zone. Any amendment of the Basic Law requires the express approval of the Allied High Commission before becoming effective. Each constituent *Land* must have a republican form of government with an assembly elected by universal suffrage.

The party standing in the *Bundestag* is as follows: Christian Democrats 139, Socialists 131, Free Democrats 52, Communists 15, others 34.

On April 28, 1949, the International Ruhr authority was formally set up to allocate the production of the Ruhr industrial area under the terms of a statute framed by representatives of the U. S., United Kingdom, France, Belgium, the Netherlands and Luxemburg.

The area and population of the republic, according to zones, is as follows:

Zone	Area (sq. ml.)	Population (census 1946)
British	37,723	22,344,900
French	15,405	5,004,400
U. S.	41,506	17,174,000
Total	94,634	44,522,900

EDUCATION. By the end of World War II practically all formal education was disrupted in Germany, but there was a gradual return to normality. Education still continued to be hampered, however, by building, textbook and paper shortages and by the difficulty of finding able and politically reliable teachers. The British and U. S. zones had 27,077 elementary and secondary schools in 1947 with 6,896,861 pupils. The French zone (including the Saar) had 5,861 elementary and secondary schools with 951,450 pupils. Western Germany had 16 universities with 71,672 students in 1948.

AGRICULTURE. About 35 per cent (34,000 square miles) of western Germany's total area is arable. Agriculture is characterized by mixed farming, the climate and the soil permitting cultivation of a variety of crops and most types of livestock. Rye and potatoes are staple crops in the north; grains and sugar beets, in the central regions. The northwestern and southern areas are noted for dairying, while the west is the chief fruit- and wine-producing region. The soil is generally poor, and high crop yields are dependent upon large-scale use of fertilizers.

Production data for western Germany

(including the Saar) are as follows (thousands of metric tons):

	1947	1948	1949*
Wheat	1,229	2,749	2,481
Rye	2,023	2,749	3,509
Barley	701	858	1,217
Oats	1,696	1,922	3,053†
Potatoes	14,411	23,547	20,875‡
Sugar beets	2,870	4,709	4,035‡

* Preliminary. † Including mixed grain. ‡ Excluding the Saar.

In Dec., 1948, western Germany and the Saar had 10,643,000 cattle, 5,616,000 hogs, 2,362,000 sheep, 1,577,000 horses and 25,088,000 poultry.

Western Germany is not self-sustaining in food. Difficulties stem to a considerable extent from the fact that Poland now controls the area east of the Oder-Neisse, which contained 28 per cent of prewar Germany's arable land and produced about 25 per cent of its food. Moreover, the population west of the Oder-Neisse is now almost as large as that of all Germany in 1936.

INDUSTRY. Western Germany's industry is well-developed and highly diversified. It accounted for about two-thirds of Germany's prewar industrial production and for a large part of iron and steel production. In May, 1949, the Anglo-U. S. bizone had 42,129 industrial establishments employing 10 persons or more (excluding the building, gas and electricity industries), with total employment of 3,903,436, of whom 21 per cent were employed in the production of machinery and vehicles and 17 per cent in the metallurgical and metal-products industries. The French zone had 6,797 industrial establishments (including the building, gas and electricity industries) employing 464,326 persons.

PRODUCTION, WESTERN GERMANY*

(monthly averages, in thousands of metric tons)

	1947	1948	1949
Pig iron and ferroalloys	189	389	595
Steel ingots and castings	255	463	763
Passenger cars	0.8†	2.50†	8.67†
Cement	225‡	465	705
Cotton yarn	5.48‡	8.55‡	19.00
Wool yarn	2.06‡	2.90‡	5.42
Rayon yarn	0.91‡	2.14‡	3.75

* Excluding the Saar. † Units. ‡ Anglo-U. S. bizone.

Steel production is limited by agreement among the occupying powers to 11,100,000 tons per year; and production of war material, some light metals, synthetic rubber, synthetic gasoline and oil, and certain types of machine tools is prohibited. Industrial production reached 100 per cent of the 1937 level in March, 1950.

TRADE. Western Germany is dependent

upon extraordinary foreign aid to pay for a considerable portion of the food and industrial raw materials which it must import. Recent foreign trade data for the area which now comprises the republic are as follows (in millions of U. S. dollars):

	1947	1948	1949
Exports	349	706	1,129
Imports	828	1,581	2,248

COMMUNICATIONS. German railway trackage and rolling stock, as well as the canal system, were largely destroyed during World War II, and the lack of adequate transportation seriously hindered German economic recovery. In May, 1949, the rail network of the Anglo-U. S. bizon had a total length of 15,950 miles, all publicly owned. Civil air traffic is handled by foreign air lines, Germany being prohibited from establishing its own lines. As of July, 1949, the west German merchant fleet consisted of about 1,100 small ships (none over 1,500 tons), with total gross registered tonnage of 270,000. The principal seaports are Hamburg and Bremen.

Inland waterway transportation is of great importance. Over half the traffic is carried on the Rhine River, which links the Ruhr area with Belgian and Dutch ports. Shipping on the Rhine is controlled by the Central Commission of the Rhine—an international body composed provisionally of U. S., British, French, Swiss, Dutch and Belgian representatives—which was reconvened in October, 1945.

FINANCE. The west German budget for the fiscal year 1950-51 estimated total revenue at Dm. 11,375,000,000 and expenditure at Dm. 12,230,000,000. New taxes were proposed to cover the deficit. About 80 per cent of the expenditures was earmarked for occupation costs, expenditures attributable to World War II (e.g., pensions) and unemployment compensation.

NATURAL RESOURCES. Aside from rich deposits of coal and potash, western Germany's mineral wealth is not considerable. The Ruhr, Krefeld and Aachen districts (mostly located in the British zone) constitute one of the world's greatest coal mining regions, with prewar reserves estimated at 65,520,000,000 tons. Production in this area (about 78 per cent of total prewar production) is handicapped by the prevalence of thin seams, but distribution is favored by easily accessible natural waterways and efficient canals. Known petroleum resources are meager, and supplies of iron ore, copper, lead and zinc are insufficient for domestic needs. Mineral production (excluding the Saar) was as follows in 1949: coal, 103,236,000 metric tons; lignite, 82,370,000 tons; iron ore, 9,108,000 tons; crude potash, 5,276,000 tons.

About 23 per cent of the total area of western Germany is covered by commercial

forests, which yield timber as well as material for paper, wood fiber, cellulose and other products.

TOPOGRAPHY. The northern plain, the central hill country and the southern mountain district constitute the main physical divisions of western Germany. The Bavarian plateau in the southwest averages 1,600 feet above sea level, but to the west, in the Black Forest, it reaches 9,721 feet in the Zugspitze, the highest point in Germany.

There are several important navigable rivers. In the south the Danube, rising in the Black Forest, flows east across Bavaria into Austria. The other important rivers flow north. The Rhine, which rises in Switzerland and flows across the Netherlands in two channels to the North Sea, is navigable by smaller ocean-going vessels as far as Cologne. The Rhine and the Elbe, which also empties into the North Sea, are navigable within Germany for ships of 400 tons. The Weser, flowing into the North Sea, and the Main and Mosel (Moselle), both tributaries of the Rhine, are also important.

CLIMATE. The climate of western Germany is intermediate between the oceanic climate of western Europe and the continental climate farther east. The average summer temperature is 60° to 62°. The sheltered mountain valleys of the south enjoy a more temperate climate, especially the valley of the Rhine above Mainz. Rainfall is heaviest in the south and west (over 30 inches).

German Democratic Republic

Area: 41,700 square miles.

Population (census 1946): 17,313,700 (predominantly German).

Density per square mile: 415.2.

Chairman, Soviet Control Commission: Marshal Vassili Chulikov.

President: Wilhelm Pieck.

Premier: Otto Grotewohl.

Principal cities (census 1946): Leipzig, 608,111 (trading, publishing center); Dresden, 463,032 (railway center, Elbe port); Chemnitz, 250,000 (textiles); Magdeburg, 236,000 (iron and steel products); Halle am der Saale, 223,000 (railway center).

Monetary unit: Ostmark.

The so-called German Democratic Republic comprises the Soviet zone of occupation of Germany. It was proclaimed on Oct. 7, 1949, with its seat at Berlin, on the basis of a constitution adopted May 30, 1949, by a people's congress chosen under a plebiscite arrangement in elections held in the Soviet zone and eastern Berlin on May 15 and 16, 1949. The congress elected a people's council (*Volksrat*) which was transformed on Oct. 7 into a provisional people's chamber (*Volkskammer*). A chamber of the states (*Länderkammer*) was

nominated on Oct. 10, and on Oct. 11 both chambers elected Communist-leader Wilhelm Pieck as president of the republic and Otto Grotewohl as minister-president or premier. The constitution is soviet in nature and the government is under complete Communist domination. Soviet government supervision is exercised by the Soviet Control Commission.

The republic lies largely between the Elbe and Oder rivers, including most of Brandenburg, Mecklenburg and the industrial Saxon and Thuringian lands.

About 22 per cent of the population is engaged in agricultural pursuits and the area is almost self-sufficient in foodstuffs. Postwar yields have, however, suffered from droughts and shortages of fertilizer. Recent production data are as follows (in thousands of metric tons):

	1947	1948	1949
Wheat	483	999	926
Rye	1,418	1,941	2,025
Oats	893	809	...
Sugar beets	3,122	4,583	3,775
Potatoes	8,055	12,408	12,500

In December, 1948, there were an estimated 3,202,000 cattle, 2,100,000 hogs and 780,000 sheep in the area.

Most of the industrial establishments, particularly in heavy industry, have been nationalized. The area accounted for 26 per cent of prewar Germany's industrial production, ranking first in textiles, paper and pulp and ceramics and glass (especially optical glass produced by the famous Jena works). Total production in 1948 was estimated at 55 to 60 per cent of the 1936 level. A Two-Year Plan inaugurated in 1949 had the object of raising the volume of production to 81 per cent of the 1936 level by the end of 1950. Unofficial production data for 1948 are as follows: pig iron, 173,000 metric tons; raw steel, 191,700 tons; caustic soda, 80,000 tons; rayon and staple fiber, 61,700 tons; yarn and thread, 80,000 tons.

Foreign trade is carried on through government-owned trading companies. Trade is confined largely to Europe. Important imports include coal, iron and steel and farm and forestry products; exports include lignite and crude potash.

Railways, highways and inland waterways were reported in 1950 to be inadequate to meet the demands of the area's economy. The rehabilitation and expansion of transport facilities is being emphasized in connection with the Two-Year Plan.

The area is not rich in minerals. It has only minor deposits of coal (1948 production: 2,840,000 metric tons) and deposits of iron ore are scanty and of low quality (1947: 280,000 tons). It does have important deposits of lignite (1948: 113,000,000 tons) and crude potash (1948: 823,000 tons).

The 1950 budget estimated revenue at Dm. 17,630,000,000 and expenditure at Dm. 17,526,000,000.

Most of the area is part of a low plain. The climate is temperate for the most part.

Berlin

Area: 344 square miles.

Population (est. June 1, 1949): 3,729,300.

Berlin, the capital of prewar Germany, is surrounded by the German Democratic Republic. It is occupied by the forces of the U. S., the U. K., France and the U.S.S.R., each having its own sector of occupation. The three western sectors contain 55 per cent of the area and 63 per cent of the population.

The supreme authority in western Berlin is exercised by the Allied High Commission; its representatives constitute a tripartite Kommandatura which has responsibility for the exercise of the powers reserved to the occupation forces under the Berlin Charter, a document analogous to the west German Occupation Statute. Other powers of government are exercised by the Berlin city government, consisting of a city assembly elected by popular vote and a *magistrat* (city council) chosen by the assembly.

Supreme authority in the eastern sector of Berlin is exercised by the Soviet Control Commission. Powers not exercised by it or by the German Democratic Republic are in the hands of a "rump" city government, which proclaimed itself in power on Nov. 30, 1948.

The Saar

Area: 898 square miles.

Population (est.): 874,000.

Density per square mile: 973.3.

Premier: Johannes Hoffman.

Principal city: Saarbrücken (est. pop. 135,000).

Monetary unit: French franc.

The Saar is an industrial and mining region lying on Germany's western frontier north of Lorraine. Under the Treaty of Versailles it was detached from Germany and placed under the administration of the League of Nations, its coal mines being transferred to France. It voted in Jan., 1935, for reunion with Germany.

Part of the French zone of occupation after World War II, it now has, under agreements with France, legislative, executive and judicial autonomy, subject to the reserved powers of France in foreign relations, defense, and the maintenance of the economic, monetary and customs union between it and France. Under its constitution it has a popularly elected diet of 50 members, to which the cabinet headed by the premier is responsible. There is no head of state as such.

Coal reserves are conservatively estimated at 9,000,000,000 metric tons. Under an agreement concluded with France on Mar. 3, 1950, the mines are under French management with some Saar participation, an annual royalty being paid to the Saar by France. Production in 1949 was 14,270,000 metric tons of coal, 1,584,000 tons of pig iron and ferroalloys and 1,752,000 tons of steel ingots and castings.

Greece (Kingdom) (Hellas)

Area: 51,182 square miles.*

Population (est. 1948)*: 7,840,000; (1940, excluding Dodecanese): Greek, 92.8%; Turkish, 3.8%; Macedonian, 1.3%; Spanish, 1%; others, 1.1%.

Density per square mile: 153.2*.

Sovereign: King Paul I.

Premier: Sophocles Venizelos.

Principal cities (est. 1940): Athens (Athenai), 392,781 (capital); Piraeus (Pelraeos), 284,079 (port of Athens); Salonika (Thessalonike), 236,524 (seaport); Patras (Patrai), 61,278 (seaport); Kavalla, 49,980 (seaport; tobacco).

Monetary unit: Drachma.

Languages: Greek, Turkish.

Religions: Greek Orthodox, 96%; Mohammedan, 2%; Jewish, 1.1%; others, .9%.

* Including Dodecanese.

HISTORY. Rugged, mountainous Greece—ancient cradle of one of the world's great civilizations—suffered cruelly in World War II and emerged as a land torn by civil war between its right and left political elements, while complete economic chaos reigned. World attention was focused on the little country (about the size of North Carolina) in 1946-49 as it became a center of political struggle between the Soviet Union and the bloc of western nations which opposed further Russian expansion.

Ancient Greece, with a recorded history going back to 776 B.C., reached the peak of its glory in the 5th century B.C., and by the middle of the 2nd century B.C., it had declined to the status of a Roman province. It remained within the Eastern Roman Empire until Constantinople fell to the Crusaders in 1204. In 1453, the Turks took Constantinople, and by 1460 Greece was a Turkish province. The insurrection made famous by the poet Lord Byron broke out in 1821, and in 1827 Greece was set up an independent nation, with sovereignty guaranteed by Britain, France and Russia. Prince Otto of Bavaria was recognized as king five years later, but he was ousted by a revolution in 1862. Prince William of Denmark, as George I, succeeded him.

Up to this time Greece consisted only of the Peloponnesus and the lower part of the peninsula north of the Gulf of Corinth. Britain gave Greece the Ionian Islands in 1864, and Thessaly was added in 1881.

Greek success in the Balkan Wars of 1912-13 brought the addition of Macedonia, Epirus, Crete and many Aegean Islands. In World War I, Greece kept a precarious neutrality until June, 1917, when King Constantine (who had succeeded George I in 1913) was forced to abdicate in favor of his second son, Alexander. Greece then entered the war on the Allied side. By the Treaty of Sévres, Greece was awarded Thrace and part of Asia Minor. Turkey, however, drove the Greeks out of Smyrna in 1922.

Greece was proclaimed a republic on March 25, 1924, and there followed strife and dissension between Royalists and Republicans, although fair order was maintained during the premierships of Eleuthérios Venizelos from 1928 to 1933.

In 1935, the people voted for the return of King George II, who had abdicated in 1924 after a short rule. In April, 1936, General John Metaxas became premier and by August he had abolished parliament and set up a dictatorship.

Greece was invaded by the Italians in 1940. By April, 1941, the Greeks not only had driven the Italians out of Greece but were well into Albania. The Germans came to Mussolini's rescue, invaded Greece from Bulgaria, and took Athens on April 27, 1941. Starvation and harsh persecution of the Greeks were common during the Axis occupation. After liberation, Greece became a land of conflict with armed bands of Royalists and Communists terrorizing the nation. The government, which had fled the country, returned in Oct., 1944, following Greece's liberation by British forces. In less than two months, all the EAM (National Liberation Front) ministers, decided leftists, resigned from the government, setting up a crisis which brought on months of fighting between British troops and leftist resistance forces.

Peace was not restored until Feb. 12, 1945. Three short-lived premierships followed until the elections of March 31, 1946, gave a majority of Assembly seats to the Populist (Royalist) party. Its leader, Constantine Tsaldaris, became premier on April 18, 1946. However, all the leftist groups boycotted the March elections, and the depredations of armed bands of Communists and Royalists continued.

The country approved the return of George II by a large majority in a plebiscite held Sept. 1, 1946. The king returned on Sept. 28 but died April 1, 1947, and was succeeded by his brother Paul I.

An important recent development in troubled Greece has been the extension of U. S. financial and technical assistance, supervised by a U. S. mission. In May, 1947, the U. S. appropriated \$300,000,000 for Greek aid.

U. S. supplies enabled Greek forces to

make good progress against the Communist guerrillas, and the cessation of hostilities was announced on Oct. 16, 1949.

U. S. aid has also had a stabilizing effect on perennially unstable Greek politics. Tsaldaris' right-wing cabinet yielded in Jan., 1947, to a coalition headed by Demetrios Maximos. On Sept. 7, with U. S. approval, Themistocles Sophoulis, veteran Liberal leader, took over at the head of a Liberal-Populist cabinet with Tsaldaris as deputy premier. The aged Sophoulis survived several Cabinet crises but died June 24, 1949. He was succeeded by Alexander Diomedes, who kept the coalition cabinet with several minor changes. Elections held Mar. 5, 1950, resulted in a centrist victory; in deference to U. S. insistence upon a strong government, Nicholas Plastiras was named premier on Apr. 14 at the head of a cabinet commanding a majority in parliament. However, he gave way to an all-Liberal cabinet, formed by Sophocles Venizelos on Aug. 21 and broadened to include Social Democrats and Populists on Sept. 13.

GOVERNMENT AND DEFENSE. Greece is a constitutional hereditary monarchy. Nominal executive power is vested in the king, but the government is administered by a Council of Ministers, headed by the premier, which must enjoy the Assembly's confidence. Under the terms of the 1947 U. S. loan, U. S. officials are advising various departments of the government, which is noted for its inefficiency.

The sovereign, Paul I, was born Dec. 14, 1901, and was married Jan. 9, 1938, to Princess Frederika Louise of Brunswick. They have one son, Prince Constantine, born June 2, 1940 (the heir apparent), and two daughters.

Military service is compulsory. U. S. aid in 1948 made possible an increase in army strength from 120,000 to 132,000; the National Guard was also increased from 30,000 to 50,000. Greek forces, which were advised by a U. S. military mission, were demobilized to some extent following the cessation of hostilities with the guerrillas in Oct., 1949. The Royal Hellenic Navy in 1949 had one cruiser, 10 destroyers, 6 submarines and numerous smaller craft.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory for all children between the ages of 7 and 12. Illiteracy was estimated at 38 per cent in 1940. In 1947-48, there were 8,701 elementary schools with 985,000 pupils, 374 secondary schools with 134,671 pupils and 2 universities (Athens and Salonika) with 7,600 students.

The predominant religion is Greek Orthodox, the religion of the state, but all faiths are tolerated.

About three-quarters of the population engages in agricultural pursuits, although only one-fifth of the land is arable. Agricultural production in 1950 was nearer to prewar levels than was any other phase of the economy, but the country was still dependent on food imports. The greater part of the cultivated area is devoted to cereals: wheat (1949: 720,000 metric tons), barley (130,000 tons) and corn (240,000 tons). There are also olive trees, vines, tobacco (1948: 36,740 metric tons) and currants. Olive oil production in 1949 was about 150,000 tons. The principal fruits are oranges, lemons, figs, mandarins, apples and pears. At the beginning of 1949, there were 6,631,000 sheep, 674,000 cattle and 518,000 hogs. Wool production in 1949 was 3,800 short tons.

Development of large-scale Greek manufacturing is blocked by lack of coal resources and of capital. The most valuable products are textiles, chemicals and food items. Among other processed or manufactured products are olive oil, wine, spirits, flour, carpets, leather, cigarettes and building materials. Postwar industrial rehabilitation has proceeded slowly, hampered by war damage and subsequent internal strife.

Postwar trade has been financed largely by U. S. aid. Exports in 1948 totaled 449,864,000,000 drachmas and imports, 2,196,019,000,000 drachmas. Principal exports were horticultural products, especially tobacco and currants, 65 per cent; oilseeds and vegetable (largely olive) oil, 12 per cent; and wine, 6 per cent. Chief customers were Britain, 22 per cent; Italy, 15 per cent; and the U. S., 14 per cent. Chief suppliers were the U. S., 51 per cent; Britain, 8 per cent; and Germany, 4 per cent.

The large prewar merchant marine, comprising 589 ships of 1,812,723 tons and 710 sailing vessels of 55,417 tons, played a vital part in the national economy. World War II shipping losses amounted to 1,178,000 tons; the merchant marine on June 1, 1948, totaled 287 steamers of 1,284,121 gross tons, and 408 sailing ships. The chief ports are Piraeus (for Athens) and Salonika.

Railway mileage in 1949 totaled 1,615; highway mileage in Dec., 1949, 10,378, about 60 per cent of which was in poor condition. Reconstruction of the transport system, financed by U. S. aid, was completed in 1949; it included extensive work on highways, port and dry-dock facilities, railways and bridges.

Postwar inflation has been severe and is still unchecked. The budget for the fiscal year 1949-50 estimated revenues at 3,953,300,000,000 drachmas and expenditures at 5,748,000,000,000 drachmas. The deficit was to be met in part by 1,650,000,000,000 drachmas from E.C.A. counterparty funds.

Greek minerals are varied but are ex-

exploited only moderately. Principal ones are lignite, iron ore, iron pyrites, magnesite, chromite, lead, bauxite, molybdenum, emery, marine salt and the country's famous marble. A fifth of the country is forested, largely with pine, fir and oak. Resin and turpentine are main forest products. The principal sea product is sponges.

TOPOGRAPHY AND CLIMATE. North central Greece, Epirus and western Macedonia all are mountainous. The main chain of the Pindus Mountains rises to 9,000 feet in places, separating Epirus from the plains of Thessaly. Greek Thrace is mostly a low-land region separated from European Turkey by the lower Maritsa River. The area of the mainland is 41,328 square miles. Among the many islands are the Ionian group off the west coast, 742 square miles in area; the Cyclades group to the south-east, 996 square miles; other islands in the eastern Aegean, including Lesbos, Samos and Khios, 1,486 square miles; and Crete, the fourth largest Mediterranean island, 3,199 square miles. Crete, largely mountainous, is about 160 miles in length, with a width varying from 7 to 35 miles.

The Dodecanese (area 1,035 sq. mi.), a group of 13 islands in the Aegean Sea near the coast of Asia Minor, were ceded to Greece by the 1947 Italian peace treaty and formally transferred on March 7, 1948.

The Greek climate is varied but generally similar to that of other Mediterranean countries. The maritime regions have a temperate climate, with short winters and little snow or frost. In the uplands the winters are long and severe. Precipitation is heaviest in the mountains. Mean temperature at Athens is about 63°, with maximum of 99° in July and minimum of 31.5° in January. The summer heat is moderated by sea breezes and cool northerly winds from the mountains.

Guatemala (Republic)

(República de Guatemala)

Area: 45,452 square miles.

Population (est. 1948): 3,717,000 (Indian, 60%; white, 5%; mixed and other, 35%).

Density per square mile: 81.7.

President: Juan José Arévalo.

Principal cities (census 1940): Guatemala City, 163,826; est. 1946, 225,000 (capital); Quezaltenango, 33,538 (coffee, sugar); Puerto Barrios, 15,784 (chief Atlantic port); Zacapa, 14,443 (coffee, livestock).

Monetary unit: Quetzal.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Once the site of the ancient Mayan civilization, Guatemala was conquered by Spain in 1524 and for the next 300 years was the major center of Spanish government in Central

America. Guatemala was one of the founders of the Central American Union in 1823, and in 1839 set itself up as a republic. From 1898 to 1920 the dictator, Manuel Estrada Cabrera, ran the country, and from 1931 to 1944, General Jorge Ubico Castañeda was the "strong man." In July, 1944, the National Assembly elected General Federico Ponce president, but he was overthrown in October, and in December Dr. Juan José Arévalo was elected as the head of a leftist regime which has continued to press its reform program in the face of conservative resistance. He took office on March 15, 1945.

The eastern border is the object of dispute with Great Britain; in Feb., 1948, two British cruisers were dispatched to British Honduras to meet threatened attacks by Guatemala.

The Constitution of 1945 provides that a president shall be elected every six years by direct popular vote and cannot succeed himself immediately. Legislative power is vested in a unicameral National Assembly whose 68 members are popularly elected for four-year terms, half the members being elected every two years. Guatemala has an army of 22,000 and a small air force.

SOCIAL AND ECONOMIC CONDITIONS. Education, advanced under Ubico, is free and compulsory. In 1947, a total of 189,950 pupils attended the 3,290 primary schools, while 62 secondary schools had total enrollment of 8,916 students. The University of Guatemala is located in Guatemala City. The government began a literacy campaign in 1946, providing 500 adult centers to augment the existing school system.

Most of the ruling class is drawn from the 5 per cent of the population that is white. Spanish is the official language, but at least eighteen Indian dialects are spoken. The Indians are the chief labor supply.

Agriculture engages 90 per cent of Guatemalans. Coffee accounts for a fifth of the cultivated land and a large part of the exports. Recent foreign-trade data are as follows (in millions of quetzales):

	1947	1948	1949
Exports	52.0	50.1	51.9
Imports	57.3	68.4	68.0

In 1948, the U. S. took 89 per cent of the exports and supplied 76 per cent of the imports. Chief exports were coffee (62 per cent) and bananas (21 per cent). Imports included flour, petroleum products, drugs, textiles and clothing.

Guatemalan manufacturing is small and local. The country has 600 miles of public railway connecting the coasts, 280 miles of private railway and 4,800 miles of highways. Puerto Barrios, on the Atlantic side,

is the main port of entry, and is linked by rail to the capital.

The national budget for 1949-50 provided for expenditure of \$41,496,265, and the national debt in May, 1948, was \$3,845,695.

Guatemala has reserves of gold, silver, lead, tin, copper, mercury, coal, antimony, salt, chromite and sulfur, but many of these minerals exist in insufficient quantity to justify exploitation, and only lead and chromite are produced commercially.

The country's vast forests, mostly in the Petén region, yield chicle for chewing gum, cinchona bark, a small amount of rubber, and dyewoods and cabinet woods, such as cedar, mahogany and logwood. About 15,000,000 acres are in hardwoods and 3,000,000 acres in softwoods.

TOPOGRAPHY AND CLIMATE. Most of Guatemala is mountainous, with many volcanic peaks, including Tajumulco, 13,814 feet high and the loftiest in Central America. The northern part is the great plain of Petén, largely uncultivated, sparsely populated, and geographically part of the Yucatán peninsula. The narrow Pacific slope, well watered and fertile, is the most densely populated and the most productive part of Guatemala. The climate is hot and humid on the coasts, with heavy rainfall, but is temperate in the highlands. The rainy season lasts from May to October in the interior, and often until December on the coast. January is the coldest month and May the warmest.

Haiti (Republic) (République d'Haïti)

Area: 10,748 square miles.

Population (est. 1949): 3,550,000 (Negro, 95%; mulatto, 5%).

Density per square mile: 330.3.

President: Paul E. Magloire.

Principal cities (est.): Port-au-Prince, 125,000 (capital, chief port); Gonaïves, 20,000 (farming district); Cap Haïtien, 15,000 (seaport); Les Cayes, 15,000 (seaport, coffee).

Monetary unit: Gourde.

Language: French.

Religion: Roman Catholic.

HISTORY. Haiti, the only Negro republic in the Western hemisphere, occupies the western third of the island of Hispaniola, which was discovered by Columbus in 1492. Its political past is stormy, and today it is the smallest and most thickly populated of the American republics, a nation beset by illiteracy and poverty.

After successive Spanish and French domination, Haiti became a kingdom in 1801 under Toussaint L'Ouverture, a Negro leader. He was later captured by the French and died in prison, but the kingdom lasted

and declared its independence in 1804, becoming a republic in 1820. In 1822 Haiti took over all of Hispaniola, and carried on until 1843, when the eastern two-thirds of the island revolted and established the Dominican Republic. Today the island is the only one in the world containing two sovereign nations.

Decades filled with revolution, corruption and disease came to a bloody climax in 1911-15, when Haiti had seven presidents in four years. After the assassination of the last one, United States Marines moved in. By a 1916 treaty, the United States agreed to help administer the country until the Haitians proved themselves capable of orderly self-government. The last Marines left in 1934, but a U. S. fiscal expert continued to supervise customs until 1941. On January 11, 1946, President Elie Lescot was driven from the country by revolution, and a three-man military junta took over until the election of President Dumarsais Estimé on Aug. 16, 1946. He was ousted in 1950 and succeeded after new elections by Paul E. Magloire.

GOVERNMENT. Normally the president is elected for six years by two-thirds vote of the National Assembly. That body consists of a 37-member Chamber of Deputies, elected for four years by popular vote; and a 21-member Senate elected for six years. The Garde d'Haïti, about 5,000 strong, serves as army and police force.

SOCIAL AND ECONOMIC CONDITIONS. Most Haitians are descended from African slaves. Their illiteracy rate is estimated at 92 per cent. Although 1949 figures showed enrollment of 97,000 in primary and secondary schools, actual attendance is probably lower. A campaign against illiteracy under UNESCO auspices was initiated in 1947. The mulattoes—lightened by the blood of the early French settlers—dominate the political and social life of the nation. Many of them are Paris-educated. While the ruling classes speak pure French, most of the people speak the patois of Creole French, and many of them still practice the strange folk religion of voodoo.

Haiti is predominantly agricultural. Coffee, which makes up more than 30 per cent of Haitian exports, is the principal crop, followed by sisal, sugar cane, cotton, bananas and cacao. Coffee exports in 1948-49 amounted to 29,010 metric tons. Manufacturing is almost entirely for local consumption, but there are several sisal factories and sugar refineries.

Exports for the trade year ended Sept. 30, 1949, totaled \$31,018,800, imports, \$31,422,800. The U. S. took 59 per cent of the exports and supplied 77 per cent of the imports. Besides coffee, exports include bananas, cacao, logwood, cotton, sisal, raw sugar, molasses and rice.

In 1949 Haiti had about 2,000 miles of improved road and 180 miles of railway. International air service is provided by PAA and KLM.

More than 75 per cent of Haitian revenue is derived from customs paid in American currency on exports and imports.

The 1949-50 budget balanced governmental revenue and expenditure at \$14,643,270. The net public debt on Sept. 30, 1948, was \$8,851,539, about 75 per cent internal.

Minerals, relatively unexploited, include gold, silver, iron, copper, antimony, tin, coal, nickel and gypsum. In 1943, a sizable bauxite deposit was found and signed over for U. S. development. Inland Haiti has forests of mahogany, pine, *lignum vitae* and other commercial woods. Output of the fisheries is insufficient to supply local needs.

TOPOGRAPHY AND CLIMATE. Haiti, about the size of Maryland, is two-thirds mountainous, with the rest marked by great valleys, extensive plateaus and small plains. The most densely populated and productive region is the Cul de Sac plain, near Port-au-Prince. Rivers are swift and generally not navigable. The climate is hot on the coast, temperate in the mountains, with hurricanes frequent in the May-to-October rainy season. Port-au-Prince has a mean annual temperature of 81°.

Hashemite Kingdom of Jordan. See Jordan

Honduras (Republic) (República de Honduras)

Area: 59,145 square miles.

Population (census 1950): 1,325,896 (mestizo, 86%; Indian, 10%; Negro, 2%; white, 2%).

Density per square mile: 22.4.

President: Juan Manuel Gálvez.

Principal cities (est. 1949): Tegucigalpa, 62,263 (capital); San Pedro Sula, 24,425 (bananas, sugar); Comayagüela, 16,907 (twin city of Tegucigalpa); La Ceiba, 13,456 (seaport, bananas).

Monetary unit: Lempira.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Columbus discovered Honduras on his last voyage in 1502; it was a Spanish colony and part of Guatemala until 1821, the year of the general Central American revolt against Spain. Honduras declared its independence in 1838, and has been troubled by revolution and war ever since. American Marines intervened in 1903 and 1923. In 1931, 1932 and 1937, major revolutions were crushed by force. The Nicaraguan-Honduras bound-

ary dispute of 1937 almost caused war, and in April, 1945, the country was invaded from Guatemala by a group of Honduran exiles, who were suppressed.

Legislative power is held by the unicameral Congress of Deputies, whose 49 members are popularly elected for six years. The president also is elected for six years and is not supposed to succeed himself, but Congress twice extended the term of President Tiburcio Carías Andino. His 16-year tenure ended Jan. 1, 1949, when Juan Manuel Gálvez, the administration candidate in the Oct., 1948, elections, took office.

Military service is compulsory. The army is estimated to be slightly under the 2,500 strength agreed upon by the Central American states.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and supposedly compulsory, but less than 25 per cent of the children go to school. The government is trying to reduce illiteracy, estimated at 82 per cent. In 1949, there were 1,700 primary schools, with 83,619 students, and 27 secondary schools, with 1,340 students. The National University at Tegucigalpa had about 500 students.

Most of the population is of mixed Spanish-Indian blood, but the ruling class is of nearly pure Spanish descent. Except among isolated Indian tribes, Spanish is the common language. Most of the Negroes are British subjects imported for plantation work.

Honduran economy depends upon bananas, which usually account for more than 50 per cent of the nation's exports. The biggest plantations are along the northern coast. Exports in 1948-49 totaled 13,926,896 stems, more than 90 per cent produced by two U. S. companies. Other crops are corn, coffee, rice, henequen, tobacco and coconuts. Honduras also is an important source of sarsaparilla. Cattle raising and dairy farming flourish on rich pasture lands. Manufacturing is small and local.

In the trade year 1948-49, exports were 41,525,119 lempiras (unadjusted for banana undervaluation); imports, 67,950,539 lempiras. The U. S. took 70 per cent of the exports and supplied 79 per cent of the imports. Chief exports were bananas (33 per cent), gold, silver, timber, coffee and abaca.

Honduras' railroads—920 miles—are almost entirely owned by fruit companies and used to transport bananas; they are confined to the northern coastal area. Since the country is mountainous and rugged, aviation has become an important means of travel. Despite its small size, the country has 63 landing fields. Highway mileage is estimated at 1,200 miles. Lake Yojoa and several rivers are navigable for small vessels.

The budget for the fiscal year 1948-49 was placed at 27,942,904 lempiras in June, 1949. The internal debt was 10,486,870 lempiras; the external debt, 1,081,535 lempiras.

In 1949 Honduras produced 16,102 troy ounces of gold and 3,421,206 troy ounces of silver; these are the two most important mineral products. Copper and iron exist in paying quantity but are undeveloped. The country is noted for rich forest resources, particularly the tropical hardwoods. In 1947, 2,333,866 bd. ft. of mahogany lumber and logs and about 15,000,000 bd. ft. of pine were exported.

TOPOGRAPHY AND CLIMATE. Honduras, in the north central part of Central America, has a 400-mile Caribbean coast-line and a 40-mile Pacific frontage. Generally mountainous, it has fertile plateaus and river valleys and narrow coastal plains. The Bahía (Bay) Islands, off the north coast, produce large quantities of coconuts. Of numerous rivers on the northern slope of Honduras, the Ulua drains a third of the nation and is navigable for most of its course. The climate is oppressive in the coastal lowlands, pleasant in the interior highlands. At Tegucigalpa, maximum temperature is about 90° (in May), and minimum 50° (December).

Hungary (Republic)

Area: 35,893 square miles.

Population (census 1948): 9,201,158* (Magyar, German, Slovak).

Density per square mile: 256.2*

Chairman of Presidium: Sándor Rónai.

Prime Minister: István Dobi.

Principal cities (census 1948*): Budapest, 1,058,288 (capital, Danube port); Szeged, 132,688 (textiles, wheat); Debrecen, 119,570 (livestock); Kecskemét, 88,283 (horticulture); Zalaegerszeg, 77,529 (farming).

Monetary unit: Forint (replacing Pengő).

Languages: Hungarian, German, Slovak.

Religions (est.): Roman Catholic, 64.9%; Greek Catholic, 2.3%; Helvetic Evangelical, 20.9%; Augsburg Evangelical, 6.1%; Jewish, 5.1%; others, .7%.

* Provisional figures.

HISTORY AND GOVERNMENT. Fascist-minded militarists and greed for more territory lined up Hungary with Germany and Italy just before World War II. The fruits of this alliance and the resultant defeat of Hungary were a smashed economy, wild inflation, poverty, Soviet occupation and a reparations debt of \$300,000,000. Politically the Soviet-supported Communist minority was thoroughly defeated by the conservative Small Landholders in the 1945 elections, yet it succeeded in taking over most of the key positions in the government. Controlling

the police, the Communists waged a war of nerves against the Small Landholders, eventually forcing the resignation of Prime Minister Ferenc Nagy on May 30, 1947, and securing the appointment of a left-wing Small Landholder, Lajos Dinnyes, in his place. Then, shortly before the 1947 peace treaty became effective, a national election was carried out on Aug. 31, with the Communists replacing the Small Landholders as the dominant party. President Tildy resigned July 30, 1948, and on Aug. 3 leftist vice-premier Árpád Szakasits was elected. Dinnyes was replaced as prime minister on Dec. 10, 1948, by István Dobi, another left-wing Small Landholder. The arrest and conviction of Catholic Cardinal Mindszenty for alleged treasonable activities in Feb., 1949, brought worldwide criticism of the Communist regime.

Two thousand years ago Hungary was part of the Roman provinces of Pannonia and Dacia on the empire's borders. In A.D. 894 it was invaded by the Magyars, who founded a kingdom. Christianity was accepted during the reign of Stephen I (St. Stephen) from 997 to 1083. The peak of Hungary's great period of medieval power came in 1342-82 under King Louis the Great (Louis I) of Anjou, whose dominions touched the Baltic, Black and Mediterranean Seas. When the Turks smashed a Hungarian army in 1526, western and northern Hungary accepted Hapsburg rule to escape Turkish occupation. Transylvania became independent under Hungarian princes. Intermittent war with the Turks was waged thereafter for some years.

After the suppression of the 1848 revolt against Hapsburg rule led by Louis Kossuth, the dual monarchy of Austria-Hungary was set up in 1867.

The dual monarchy was defeated with the other Central Powers in World War I, and the new Hungary underwent hard times. First there was a short-lived Socialist Republic in 1918. The chaotic Communist rule of 1919 under Béla Kun ended with the Rumanians occupying Budapest on Aug. 4, 1919. When the Rumanians left, Admiral Nicholas Horthy entered the capital with a national army. The Treaty of Trianon of June 4, 1920, cost Hungary 75 per cent of its land and more than 50 per cent of its population. Meanwhile, the National Assembly had restored the legal continuity of the old monarchy, and on March 1, 1920, Horthy was elected regent. Former King Charles made two unsuccessful efforts to return to the throne in 1921.

After 1920 Hungary was, in effect, ruled by its great land owners, but the turn came in 1932 with the accession of General Julius de Gömbös, a pro-Fascist, as prime minister. Under Gömbös and his successors, Kálmán Darányi in 1936 and Béla Imrédy in 1938, co-operation with

Italy and Germany was Hungary's guiding principle. Hungary signed the anti-Comintern pact on Jan. 13, 1939, and the Three Power Pact of Germany, Italy and Japan on Nov. 20, 1940. As inducement and reward for these actions, Hungary got part of Slovakia and all of Ruthenia from Czechoslovakia in 1938 and 1939; and northern Transylvania from Rumania in 1940.

Following the German invasion of Russia on June 22, 1941, Hungary joined the attack against the U.S.S.R., but the war was not popular and Hungarian troops were almost entirely withdrawn from the eastern front by May, 1943. The government of Nicholas von Kállay was overthrown March 19, 1944, and German occupation troops set up a puppet government after Admiral Horthy's appeal for an armistice with advancing Soviet troops had resulted in his overthrow on Oct. 16. The German regime soon fled the capital, however, and on Dec. 23 a provisional government was formed in Soviet-occupied eastern Hungary. On Jan. 20, 1945, it signed an armistice in Moscow.

On Feb. 1, 1946, the National Assembly approved a constitutional law abolishing the 1,000-year-old monarchy and establishing a republic. Up to that time, Admiral Horthy had been regent for a non-existent king.

The Soviet-type constitution adopted by Parliament on Aug. 18, 1949 declared Hungary to be a "people's republic." The supreme organ of state control was declared to be the Parliament, with deputies elected every 4 years by direct vote. When Parliament is not in session, power is exercised by the presidium headed by a chairman. Executive power is vested in the cabinet headed by the premier.

Only the Communist-controlled, left-wing coalition was represented in the National Assembly after elections held May 15, 1949, in which only one slate of candidates was presented.

PEACE TREATY OF 1947. The final peace treaty which took effect Sept. 15, 1947, fixed Hungary's frontiers as they were on Feb. 1, 1938, except that a small bridgehead on the south bank of the Danube opposite Bratislava was ceded to Czechoslovakia. Hungary was to pay reparations of \$300,000,000 over a period of 8 years, \$200,000,000 to the Soviet Union and \$100,000,000 to Yugoslavia and Czechoslovakia. The treaty also provided freedom of navigation on the Danube for nationals of all states.

The strength of Hungarian armed forces was fixed by the treaty as follows: army, 65,000, including frontier, anti-aircraft artillery and river flotilla personnel; air force, 90 planes with a personnel of 5,000.

Soviet troops are permitted to maintain communication through Hungary to Austria until a treaty with Austria takes effect.

SOCIAL AND ECONOMIC CONDITIONS. Education is state-controlled and is compulsory between the ages of 6 and 14. Parochial schools were nationalized in 1948. In 1949 there were 1,432 elementary schools and 4,770 general schools with 1,220,000 pupils, and 388 secondary schools with 83,000 pupils. The 16 universities and colleges had 28,000 students.

Under laws passed in 1927-28, optional social insurance was placed under the control of the national social insurance institute, which offered medical, hospital, old age and disability insurance. Insurance for farmers was made obligatory. The Land Reform Act issued in March, 1945, provided for the confiscation of all estates over 1,500 acres; about 8,000,000 acres were divided among some 500,000 families.

Agriculture is the basis of Hungarian economic life, engaging more than half the population. Of the total area, 63.6 per cent can be cultivated and 17.9 per cent is meadowland and rough pasture. Cereals grown in the fertile Danubian plains are the chief crops. Leading crops in 1948 were wheat (1,583,314 metric tons), corn (2,861,709 tons), potatoes (2,116,881 tons), barley (691,719 tons), rye (785,696 tons) and sugar beets (1,771,000 tons). In addition, the cultivation of vines, fruit and garden produce is important; the famous Tokay wine is produced on the southern slopes of the Hegyalja in the northeast. Wine production averages 100,000,000 U. S. gallons annually (1949: 119,000,000 U. S. gallons).

Horse-breeding is a traditionally important branch of agriculture. Hungarians have a great love for horses, and their excellent breeds were exported in large numbers before World War II. Livestock in 1949 included 600,000 horses, 1,870,000 cattle, 700,000 sheep and 3,250,000 hogs.

The dominant industries are all based on agriculture, with flour milling in first place, followed by sugar refining, brewing and canning. The second group of industries make hardware and machinery. Most of the machine industry is concentrated in Budapest and Győr. Cotton leads the textile industry, especially in Budapest, which is also a center of woolen manufactures. Hemp and flax weaving are important. In 1945 there were about 4,350 manufacturing establishments with 180,000 workers. About 90 per cent of industrial production was nationalized under laws enacted in 1946 and 1948. Legislation in the latter year affected about 500 mining and industrial enterprises employing more than 100 persons each. In addition, the Soviet Union has taken over all German-owned plants as reparations, and in 1946 Soviet-Hun-

garian companies were formed to exploit bauxite, petroleum, and air and river navigation.

Foreign trade figures for two years are as follows (in millions of forint):

	1947	1948
Exports*	1,042	1,933
Imports	1,453	1,975

* Excluding reparations shipments.

The chief customers in 1948 were Britain, 17 per cent; U.S.S.R., 17 per cent; Czechoslovakia, 13 per cent; and Austria, 7 per cent. The leading suppliers were U.S.S.R., 15 per cent; Yugoslavia, 15 per cent; Britain, 14 per cent; and Czechoslovakia, 13 per cent. Chief exports were grain, 15 per cent; textiles, 12 per cent; live animals and animal products, 11 per cent; and machinery, 9 per cent. Leading imports included coal, oil, iron and steel products, forest products, minerals and ores.

The focal point in the country's transportation system is the Danube River, navigable for 423 miles in Hungary. The nation's central location makes it the center of an important transit trade; its pre-war river fleet was the largest on the Danube. Railroad mileage in 1948 totaled 5,173, highway mileage in 1949, 10,248. Transportation facilities suffered heavy damage in the last part of the war.

The 1950 budget placed revenue at 17,537,000,000 forint and expenditure at 17,454,000,000 forint. The national debt (postwar only) on Dec. 31, 1946 totaled 1,630,000,000 forint.

While Hungary generally is mineral-poor, it has an estimated 250,000,000 tons of bauxite—about 25 per cent of the world's known reserves. Production in 1947 was estimated at 340,300 metric tons. The coal is of low quality and is insufficient to meet domestic needs; production in 1948 was 1,061,502 metric tons, and output of lignite was about 10,620,000 tons. Other minerals include iron ore, manganese and gold. Petroleum production in 1948 was about 3,700,000 barrels. Uranium is reported to exist in Hungary.

About 12 per cent of Hungary is forested, but the products are of little importance. There are valuable fisheries in Lake Balaton and on the Danube.

TOPOGRAPHY AND CLIMATE. Most of Hungary is a fertile, rolling plain lying east of the Danube, and drained by the Danube and the Tisza Rivers. In the extreme northwest is the Little Hungarian Plain. South of that area is Lake Balaton, 250 square miles, the largest lake of western and central Europe; to the west of it lies the Bakony Forest, part of an upland extension of the Alps, called the Hungarian Mittelgebirges. Entering Hungary in

the northwest, the Danube flows south through the central plain. The Tisza, rising in the eastern Carpathians, also flows south through eastern Hungary.

Hungary's mean annual temperature ranges from 48° in the north to 52° in the south. Precipitation varies from 30 to 35 inches in the Bakony Forest to less than 15 inches in the east; most of the rain falls in May and June. High summer temperatures and a long autumn are favorable to agriculture.

Iceland (Republic) (Island)

Area: 39,709 square miles.*

Population (est. Dec. 31, 1949): 141,000 (almost entirely Icelandic).

Density per square mile: 3.5.

President: Sveinn Björnsson.

Prime Minister: Ólafur Thors.

Principal city (est. 1949): Reykjavík, 54,700 (capital and only large town).

Monetary unit: Króna.

Languages: Icelandic, Danish.

Religion: Evangelical Lutheran.

* Including several off-shore islands.

HISTORY. Iceland, in the North Atlantic on the rim of the Arctic Circle, did not fight in World War II, but still it won and lost in the conflict. It won its complete independence from Denmark but lost its placid isolation when the United States and Great Britain moved in to prevent German seizure, and to establish air and naval bases. A new era then dawned for Iceland. Because of its strategic position on the great-circle air route between America and Europe, about half way between New York and Moscow, the country assumed new significance in an air-minded world.

Iceland was first settled shortly before 900, mainly by Norse. A constitution drawn up about 930 created a form of democracy and provided for an Althing, or General Assembly, now the oldest legislative body in the world. In 1262-64, Iceland came under Norwegian-Danish rule. Through five centuries of intermittent plague, earthquake, famine and volcanic eruption, the stout Icelanders endured, and in 1874 they obtained their own constitution. In 1918 Denmark recognized Iceland as a separate state with unlimited sovereignty, but still nominally under the Danish king. On June 17, 1944, after a popular referendum the Althing proclaimed Iceland a completely independent republic.

The British occupied Iceland in 1940, immediately after the German invasion of Denmark. In 1942, the United States took over the burden of protection. Iceland refused to abandon its neutrality in World War II, and thus forfeited charter member-

ship in the United Nations, but it was co-operative with the Allies throughout. Since the end of the war, the country has been apathetic toward foreign bids for air bases and other rights.

GOVERNMENT. Constitutionally, the president is elected for four years by popular vote. President Björnsson was named to the office in 1944 by acclamation of the Althing and was re-elected in 1945 and 1949 for regular four-year terms. Executive power resides in a Prime Minister. The Althing is composed of two houses, one with 17 members and the other with 35; each has equal constitutional power. Iceland has no army or navy.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is virtually unknown in Iceland. Education is compulsory from 7 to 14, and mobile schools are sent traveling through the sparsely settled areas. When the University of Iceland, established in 1911, needed new buildings in 1935, the government licensed it to conduct a national lottery to raise the funds. The high number of scholarships and the low tuition fees make higher education virtually free to any qualified applicant.

Iceland publishes more books, newspapers and magazines per capita than any country in the world. Its language, Icelandic, has no dialects and has changed little through the centuries. In addition, Danish is widely understood and spoken. The Evangelical Lutheran Church is state-supported, but there is complete religious freedom. A social insurance system set up in 1935 and extended in 1946 provides accident, sickness and old age benefits, as well as hospital and medical care.

Approximately six-sevenths of Iceland is unproductive, and only one-fourth of one per cent is under cultivation. With about 30 per cent of the population engaged in farming, sheep raising is the most important branch of this industry. Hay, potatoes and turnips are the principal crops.

About one-sixth of the people are engaged in fishing, and fish and fish products make up the bulk of Iceland's exports. The annual catch averages about 350,000 tons (1949: 337,322 tons), and the total value of the industry was estimated in 1947 at \$38,500,000. British, French and Norwegian fishing craft visit Iceland's fisheries, which lead the world in cod and are important for herring, plaice and halibut.

In 1949, exports totaled 289,224,000 kr.; imports, 423,945,000 kr. Fish and fish products accounted for 98 per cent of the exports. Principal customers were Britain, 36 per cent; Germany, 22 per cent; and the U. S., 6 per cent. Chief suppliers were Britain, 27 per cent; the U. S., 17 per cent; and Denmark, 9 per cent.

Iceland has no railways. Highways totaled 3,800 miles in 1948. Motor vehicles are rapidly replacing the traditional horse-drawn cart. On Dec. 31, 1948, the merchant marine totaled 569 vessels (over 12 gross tons) aggregating 81,468 tons.

Expenditure for the calendar year 1950 was estimated at 298,584,000 kr.; revenue, 300,844,000 kr. The national debt was 198,380,000 kr. on Dec. 31, 1948.

TOPOGRAPHY AND CLIMATE. Iceland, a bleak, volcanic island about the size of Kentucky, has maximum dimensions of 298 by 194 miles; it is mostly tableland, high, rugged and barren. It is one of the world's most volcanic regions. Mt. Hekla (4,747 ft.), near the southern coast, is the most notable of its volcanoes, many of which are still active and cause frequent earthquakes. Small fresh-water lakes are found throughout the island, and there are many natural oddities including hot springs, geysers, sulfur beds, canyons, waterfalls and swift rivers. More than 13 per cent of the area is covered by snowfields and glaciers, and most of the people live in the 7 per cent of the island comprising fertile coastlands. One-third of the much-indented, 3,730-mile coastline belongs to a peninsula to the northwest, joined to the mainland by an isthmus four miles wide. Vegetation is of the Arctic type, mostly stunted. Except for peat and fisheries, Iceland has no natural resources.

The Gulf Stream modifies Iceland's climate to make it much like that of southern Canada, though with longer winters and shorter summers. The mean annual temperature at Reykjavik is 39.4°, with January the coldest month (34.2°) and July the warmest (51.6°).

Iran (Kingdom)

Area: 634,413 square miles.
Population (est. 1943): 17,000,000 (Iranian, Kurdish, Azerbaijani).
Density per square mile: 26.7.
Ruler: Mohammed Riza Pahlavi.
Prime Minister: Ali Razmara.
Principal cities (est. 1943): Teheran, 850,000 (capital); (census 1940): Tabriz, 213,542 (capital, Azerbaijani); Isfahan, 204,598 (cotton, tobacco); Meshed, 176,471 (Moslem shrine); Shiraz, 129,000 (wine, sugar beets).

Monetary unit: Rial.
Languages: Iranian (Persian), Kurdish, Azerbaijani.

Religions: Moslem (Shiah), about 90%; Moslem (Sunni), about 5%; Armenian; Jewish; Nestorian; Parsi.

HISTORY. Oil-rich Iran, roughly one-fifth the size of the United States, was called Persia before 1935. Its key location blocks the lower land gate to Asia, and also stands

in the way of traditional Russian ambitions for access to the Indian Ocean. In modern times, Iran has drawn Big Power interest because of its rich oil deposits.

Iran's history is a long one of rising and falling dynasties. After periods of Assyrian, Median and Achaemenidian rule, Persia became a powerful empire under Cyrus the Great, reaching from the Indus to the Nile at its zenith in 525 B.C. It fell to Alexander in 331-30 B.C., to the Selucidae in 312-02 B.C., and to the Parthians about 130 B.C. A native Persian regime arose about A.D. 224, was weakened fighting the Turks, and fell to the Arabs in 637. In the 12th century the Mongols took their turn ruling Persia, and in the early 18th century the Turks and Russians occupied it. In modern times, Russia, Turkey, Britain, France, and, most recently, the United States, all have taken keen competitive interest in Iran.

An Anglo-Russian convention of 1907 divided Iran into two spheres of influence. British attempts to impose a protectorate over all of Iran were defeated in 1919. On Feb. 26, 1921, General Riza Pahlavi seized the government and was elected hereditary shah in 1925. Subsequently he did much to modernize the country, and abolished all foreign extraterritorial rights.

Increased pro-Axis activity led to Anglo-Russian occupation of Iran in August, 1941, and deposition of the shah in favor of his son, Mohammed Riza Pahlavi.

In November, 1945, a Soviet-inspired autonomist movement won control of Azerbaijan, Iran's northwest province. To protect their advantage, the Russians kept troops in that area past the treaty evacuation date of March 2, 1946. The Iranians promptly protested this breach of agreement to the United Nations. The Russians evacuated their troops on May 6 but not before they had forced Iran to promise them oil concessions in the north.

Iranian troops reoccupied Azerbaijan in Dec., 1946, to clear the way for parliamentary elections which, held in Jan., 1947, resulted in a victory for Ghavam-es-Saltaneh's Government party.

Parliament rejected the Soviet oil pact in Oct., 1947, and following a sharp Soviet note protesting this action, Ghavam-es-Saltaneh lost the parliament's confidence and was replaced on Dec. 28, by the aged Ibrahim Hakimi. His cabinet and those that followed were weak and inefficient. On June 26, 1950, Lt. Gen. Ali Razmara took office at the head of a cabinet pledged to restore efficient and honest government.

GOVERNMENT AND DEFENSE. Iran is a constitutional monarchy, and the shah has the usual powers of the head of a parliamentary state. Executive power is exercised by a cabinet headed by the prime minister, who is appointed by the shah and is re-

sponsible to the Majlis (parliament), which has 136 popularly-elected members.

In May, 1949, the constitution was amended to permit the shah to dissolve the Majlis; at the same time legislation was enacted to set up an upper house or Senate provided by the 1906 constitution but never established.

Military service is compulsory; the initial training period is 2 years. The army, modernized and reorganized by Riza Pahlavi, father of the present shah, consists of about 90,000 men. The air force has several hundred planes, and the navy several small craft in the Persian Gulf. There is also a U. S.-trained police force of 20,000.

SOCIAL AND ECONOMIC CONDITIONS. Education has made good progress in the last 25 years, supplanting the old and essentially religious system. In 1938 (latest data available in 1950) there were 8,381 schools with attendance of 457,236. A university was opened at Teheran in 1934. Illiteracy is high, though decreasing.

Iran is predominantly agricultural. Large estates are numerous, and irrigation is common, especially on the central plateau. The principal crops are wheat (est. 1949: 1,630,000 tons) and barley (650,000 tons). Rice production, confined largely to the Caspian provinces, was estimated at 308,000 tons in 1948.

Other crops include grapes, dates, apricots, tobacco, tea, cotton, sugar beets and corn. There are extensive grazing lands. Wool production in 1948-49 was estimated at 11,000 tons; in Dec., 1948, there were 11,000,000 sheep.

Iran must still import many manufactured necessities, but several new factories were established by the government after 1925 including sugar plants, rice and oil mills, textile factories, a cement factory, copper smelter, glycerine factory and small arms factory. The Chalus silk mill produces 1,000,000 yards or more a year. Both sugar and tobacco are government monopolies. The manufacture of carpets, for which Iran is famous, is the most valuable industry.

Foreign-trade data (trade years beginning March 21) are as follows, in billions of rials:

	1947-48	1948-49	1949-50
Exports	12.36	19.01	17.24
Imports	5.78	5.48	9.22

The chief exports in 1948-49 were petroleum and products, 90 per cent; rugs and carpets, 3 per cent; and fruits and berries, 3 per cent. Leading customers were Britain, 40 per cent; India, 11 per cent; and the U. S., 4 per cent. Chief suppliers were the U. S., 30 per cent; Britain, 27 per cent; and India, 9 per cent.

Motorable roads in 1949 totaled some 17,-

000 miles, about one-fifth asphalted. Railway mileage open to traffic was 1,748 (1948). The principal line (870 mi.) connects Bandar Shahpur on the Persian Gulf with Bandar Shah on the Caspian Sea. It carried 5,000,000 tons of supplies to Russia during World War II. Iranian State Airlines and other lines provide service.

The budget for 1949-50 forecast revenue of 6,313,713,760 rials and expenditure of 9,444,503,057 rials. The national debt in Dec., 1948, was 5,400,000,000 rials. Income from various monopolies and oil royalties are important.

Considerable mineral wealth exists, but only oil is exploited commercially. The principal field, near Shushar in the southwest, is worked by the Anglo-Iranian Oil Company, whose concession began in 1901 and runs to 1993. Royalties are paid to Iran on a tonnage basis. Production in 1949 was 26,806,564 long tons (about 202,800,000 barrels). The refinery at Abadan processed 23,272,061 tons.

The main forest belt on the northern Elburz slope supplies railroad ties, charcoal and firewood. Gums are the most valuable forest product. Fisheries are worked in the Persian Gulf and the Caspian Sea.

TOPOGRAPHY AND CLIMATE. Iran is, in general, a plateau averaging 4,000 feet elevation. In addition, there are maritime lowlands along the Persian Gulf and the Caspian Sea. The Elburz Mountains in the north rise to 18,603 feet at Mt. Demavend. From northwest to southeast, the country is crossed by a desert 800 miles long and 100 to 200 miles wide. Iran's only navigable river is the Karun in the southwest.

The central plateau is hot in summer and very cold in winter, but the Caspian area has a sub-tropical climate. Mean temperatures vary at Teheran from 35° in January to 85° in July (yearly average 62°); at Bushire, on the Persian Gulf, from 58° in January to 90° in July and August (average 75°). Rainfall is light.

Iraq (Kingdom)

Area: 116,600 square miles.*
Population (census 1947): 4,794,449
(Arab, 75%; Kurdish, 15%; Iranian, 3.75%; others, 6.25%).
Density per square mile: 41.1.
Ruler: King Faisal II.
Regent: Crown Prince Abdul-Ilah.
Prime Minister: Nuri as-Said.
Principal cities (est. 1946): Baghdad, 832,927 (capital); Mosul, 279,361 (farming, oil); Basra, 181,814 (chief port).
Monetary unit: Dinar.
Languages: Arabic, Kurdish.
Religions: Moslem (Shiah), 53%; Moslem (Sunni), 35%; Christian, 2.8%; Jewish, 2.5%; others, 6.7%.

* Excluding southern and western desert areas.

HISTORY. Iraq, a triangle of mountains, desert and fertile river valley less than half the size of Texas, is bounded east by Iran, north by Turkey, west by Syria and Jordan, and south by Saudi Arabia. From earliest times it has been known as Mesopotamia—the land between the rivers—for it embraces a large part of the alluvial plains of the Tigris and Euphrates.

An advanced civilization existed in Mesopotamia by 4000 B.C. Sometime after 2000 B.C. it became the center of the ancient Babylonian and Assyrian empires. It was conquered by Cyrus the Great of Persia in 538 B.C., and by Alexander in 331 B.C. After an Arab conquest in A.D. 637-40, Baghdad became capital of the ruling caliphate. The country was cruelly pillaged by the Mongols in 1258, and during the 16th, 17th and 18th centuries was the object of repeated Turkish-Persian competition.

Nominal Turkish suzerainty imposed in 1638 was replaced by direct Turkish rule in 1831. In World War I an Anglo-Indian force occupied most of the country, and Britain was given a mandate over the area in 1920. The British recognized Iraq as a kingdom in 1922 and terminated the mandate in 1932, when Iraq was admitted to the League of Nations. In World War II, Iraq generally adhered to its 1930 treaty of alliance with Britain, but in 1941 British troops were compelled to put down a pro-Axis revolt led by Prime Minister Rashid Ali. Iraq became a charter member of the Arab League in March, 1945 and Iraqi troops took part in the Arab invasion of Palestine in May, 1948.

King Faisal II, born on May 2, 1935, succeeded his father, Ghazi I, who was killed in an automobile accident on April 4, 1939. The king's uncle, Abdul-Ilah, is regent.

GOVERNMENT AND DEFENSE. Under the 1924-25 constitution, Iraq is a hereditary monarchy with a two-house Parliament. The Senate is named by the king for a term of eight years; the 115-member Chamber of Deputies is elected popularly for four years. Executive power is vested in a Council of Ministers, headed by the prime minister, whom the king appoints.

Military service is compulsory, with an initial training period of 1½ to 2 years. Army and air force strength in 1938 was 28,000. Both were trained and re-equipped by the British during World War II. The British-trained police force numbers about 21,000. The 1930 treaty gives Britain the provisional right to keep troops in Iraq.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is free and nominally compulsory. Secondary education is neither free nor compulsory. In 1946-47 there were 967 state elementary schools, with 128,765 pupils, and 83 intermediate and secondary schools, with 13,783 pupils. Four-

teen colleges had a combined enrollment of 5,266. There are no universities in the country.

The chief economic activity is agriculture, dependent upon irrigation and confined to the valleys of the Tigris and Euphrates. Iraq supplies about 80 per cent of the world's dates (1949: 120,000 metric tons). Chief among the cereal products of Iraq are barley (1949: 750,000 metric tons), wheat (450,000 tons), rice, sorghum, maize and millet. Many fruits and some tobacco and cotton are grown. Grazing is the principal occupation of the many nomadic and seminomadic tribes. Livestock estimates in 1949 included 822,000 cattle, 7,000,000 sheep, 2,000,000 goats and 291,000 camels. Wool production in 1949 was 11,000 metric tons.

Industry is still embryonic. Of approximately 100 manufacturing firms, the most important are those making brick, tile, woolen textiles, vegetable oils, soap, glass and cigarettes.

Recent foreign-trade data are as follows (in millions of dinars):

	1947	1948	1949
Exports	28.7*	19.8*	26.1*
Imports	40.0	46.1	40.6

* Adjusted to include estimated value of crude petroleum exports.

Chief exports in 1947 were petroleum, 50 per cent; dates, 23 per cent; and barley, 22 per cent. Exclusive of petroleum, India took 25 per cent of the exports; Britain 15 per cent; and Italy, 13 per cent.

The only port for seagoing vessels is that of Basra, located on the Shatt al-Arab River near the head of the Persian Gulf. River vessels plying the Tigris between Basra and Baghdad have tonnage of more than 60,000. There are about 4,000 miles of improved and unimproved roads. Iraq State Railways, the only rail line, operates three lines totaling 1,555 miles. There is an airport and seaplane base at Basra.

Oil production centers at the Baha Gurgur fields near Kirkuk are operated on behalf of an international group by the British-managed Iraq Petroleum Company (production 1949: 3,781,957 long tons).

Oil is piped to Haifa in Palestine and Tripoli in Lebanon. Another field is operated by the Kanaqin Oil Company (Anglo-Iranian Oil Company subsidiary), and produces only for local consumption (production 1949: 365,313 long tons).

The 1950-51 budget amounted to 23,875,-300 dinars. The capital works budget, based on oil royalties, usually balances the ordinary budget. There is no external debt.

TOPOGRAPHY AND CLIMATE. Iraq has arid desertland west of the Euphrates, a broad central valley between the Euphrates and Tigris, and mountains in the north-

east. The fertile lower valley is formed by the delta of the two rivers, which join about 120 miles from the head of the Persian Gulf. The gulf coast line is 26 miles.

Iraq's climate, generally, runs to great extremes—long hot summers and short cold winters. The area on the Persian Gulf is one of the hottest places in the world. Average temperature at Baghdad is 49° in January and 92° in July and August.

Ireland (Republic)

Area: 26,601 square miles (not including larger water bodies).

Population (est. 1949): 2,991,000 (almost entirely Irish).

Density per square mile: 112.4.

President: Séan T. O'Kelly.

Prime Minister: John A. Costello.

Principal cities (census 1946): Dublin (Baile Atha Cliath) 506,635 (capital); Cork, 75,361 (seaport); Kingstown (Dun Laoghaire), 44,689 (seaport); Limerick (Luimneach), 42,987 (seaport).

Monetary unit: Irish pound.

Languages: Gaelic, English.

Religions (1936): Roman Catholic, 93.4%; Protestant Episcopal, 4.8%; Presbyterian, 1%; others, .8%.

HISTORY. The young Republic of Ireland—formerly Eire, and before that the Irish Free State—is an agrarian state that occupies five-sixths of the island of Ireland west of England, across the Irish Sea.

About the beginning of the Christian era, Ireland was divided into five kingdoms—Ulster, North Leinster, South Leinster, Munster and Connaught—each with its own ruler, but each subject to the overlord of all Ireland who dwelt at Tara. St. Patrick introduced Christianity in A.D. 432 and became the country's patron saint.

Norse depredations along the coasts, starting in 795, ended in 1014 with Norse defeat at the Battle of Clontarf by forces under Brian. In the middle of the 12th century, the Pope gave all Ireland to the English crown as a papal fief. In 1171 Henry II of England was acknowledged "Lord of Ireland," but native sectional rule continued for centuries, and English control over the whole island was not reasonably absolute until the 17th century. By the Act of Union (1800), England and Ireland became the "United Kingdom of Great Britain and Ireland."

The great potato famine of 1846-48 took many lives and drove millions to emigrate to America.

Several home-rule bills were introduced in the English Parliament in the 19th century, but failed of passage. One was finally approved in 1914, but enforcement was suspended by the outbreak of World War I. During the war, agitation for freedom was carried on by the nationalist

party—Sinn Féin (Ourselves). In 1916 the British quickly suppressed the famous Easter Week rebellion and executed its leaders.

After the 1918 elections, seventy-three of the Sinn Féiners elected to the English Parliament met in Dublin, proclaimed themselves an Irish Parliament, and passed a declaration of independence. The result was war between Irish nationalists and British troops from January, 1919, to May, 1921. A treaty ratified in December, 1921, gave Ireland political status equal to that of Canada. Six Ulster counties, largely Protestant, formed a separate government as Northern Ireland, closely bound to England; the other twenty-six became the Irish Free State. Republican extremists, headed by Éamon de Valera, refused for several years to recognize the treaty.

William Cosgrave, leader of the Sinn Féin's right wing, was president from 1922 to 1932. In the latter year, De Valera's party, Fianna Fáil, won control of the government. Under De Valera's leadership a new constitution was adopted in 1937 making the nation, in effect, a republic. The country's former name of "Eire" was restored by the constitution.

Dr. Douglas Hyde, elected without opposition as Eire's first president in 1938, was succeeded in 1945 by Séan T. O'Kelly, the Fianna Fáil nominee. The country maintained strict neutrality during World War II.

De Valera's long tenure as prime minister came to an end in Feb., 1948, when the Fianna Fáil lost its absolute majority in the parliamentary elections. John A. Costello, a Fine Gael moderate, took office at the head of a six-party coalition cabinet on Feb. 18, 1948.

The nation severed its last ties with the British crown at midnight April 17, 1949, and officially proclaimed itself the Republic of Ireland on the next day—Easter Monday.

GOVERNMENT AND DEFENSE. Ireland is a sovereign, independent republic. The president, directly elected for seven years, names the prime minister on the nomination of the Chamber of Deputies. Parliament (Oireachtas) has two houses. The Chamber of Deputies (Dáil Éireann) has 147 members elected by proportional representation for a five-year term. The Senate (Seanad Éireann) has 60 members, of whom 11 are named by the prime minister, 6 by the universities, and 43 from vocational panels; its powers are limited.

Party representation in the Dáil Éireann after the elections of Feb. 4, 1948, was as follows: Fianna Fáil, 68; Fine Gael, 31; Labour, 14; Clann na Poblachta, 10; others, 24.

Military service is voluntary. The army

has a permanent authorized strength of 12,500. In 1938 Britain gave up its last defense posts in Eire, including those at Cobh, Berehaven and Lough Swilly.

SOCIAL AND ECONOMIC CONDITIONS. Elementary education is free and is provided in state schools; secondary education is under private control, notably the religious orders. Technical and agricultural education is under local control, aided by state subsidies. The 4,946 elementary schools in 1947-48 had 444,132 pupils; 404 secondary schools had 43,780 students. The University of Dublin (Trinity College), founded in 1591, had an enrollment of 2,214 in 1947-48, and the National University of Ireland (constituent colleges at Cork, Galway and Dublin) had 4,988.

The majority of the people are English-speaking, although the government has attempted to promote the traditional Gaelic language, which is an essential part of the curriculum for all state schools.

Ireland is predominantly an agricultural country, with about 70 per cent of the total land area (17,000,000 acres) devoted to crops and pasture. The pastoral industry is the basis of the nation's economy, but recent years have brought a greater diversity in agriculture, marked by large increases in sugar beet and wheat production. Principal crops in 1949 were wheat, 361,000 long tons; rye, 3,600 tons; oats, 559,300 tons; potatoes, 2,692,200 tons; sugar beets, 642,600 tons; and flax, 2,100 tons. Other staple crops are turnips, cabbage and hay. Livestock in June, 1949, included 4,126,800 cattle, 2,182,500 sheep, and 675,000 hogs. Wool output in 1949 was 7,000 tons; butter output, 38,280.

The government's self-sufficiency policy, plus financial and tariff inducements, have promoted considerable industrial development since 1928. The leading manufactures, in order of value, are ordinarily beverages, tobacco, wood, paper, clothing, textiles and metals. The hydroelectric plant erected on the Shannon River in County Limerick provides cheap electricity for homes and factories.

Trade statistics are as follows (in millions of Irish pounds):

	1947	1948	1949
Exports (including re-exports)	39.5	49.3	60.5
Imports	131.3	136.3	129.8

The leading customer in 1949 was Great Britain, 75 per cent, followed by Northern Ireland, 13 per cent, and the Netherlands, 2.3 per cent. Britain was also the chief supplier, 55 per cent, followed by the U. S., 14 per cent, and the Netherlands, 2.4 per cent. Major exports in 1948 were cattle and horses, 46 per cent; meat, fish and dairy products, 22 per cent; and ale, 8 per cent.

Major imports were wheat, coal, apparel, cotton products and maize.

The merchant marine in 1948 had 448 vessels with a net tonnage of 46,161. Almost all transport facilities are nationalized. Railway mileage is about 2,500. Main roads in 1949 totaled 49,071. Shannon is rapidly developing into a key international airport. There are 670 miles of canals and navigable waterways.

The 1950-51 budget estimated expenditure at £76,000,000 and revenue at £75,000,000. The public debt on March 31, 1950, was £157,000,000; assets were £88,000,000.

In 1949, Ireland mined 127,000 short tons of coal, some gypsum, and considerable peat from its bogs, but otherwise the mineral resources are negligible, as are those of the forests. The fishing industry employs about 10,000 men. The 1949 catch, including mackerel, herring, whiting, cod, plaice and shellfish, was valued at £498,248.

TOPOGRAPHY AND CLIMATE. Occupying the entire island except for the six northern counties of Ulster, Ireland resembles a basin—a central plain rimmed with mountains, except in the Dublin region. The mountains are low, with the highest peak, Carruntuohill in Kerry County, rising 3,415 feet. The principal river is the Shannon, which begins in the north central area, flows south and southwest for about 240 miles and empties into the Atlantic. About 20 per cent of the country is covered by bogs. Among the many lakes are the famous Lakes of Killarney in the southwest county of Kerry.

A moist and mild climate, with annual rainfall running between thirty and forty inches fairly evenly distributed throughout the year, is influenced by the Gulf Stream, which makes the winters warmer than in other places in the same latitude. The mean temperature at Dublin is 41.7° in January and 60.5° in July.

Israel (Republic)

Area (approximate): 7,800 square miles.

Population (approximate): 1,000,000.

President: Dr. Chaim Weizmann.

Premier: David Ben-Gurion.

Principal cities (est. 1949): Jaffa-Tel Aviv, 325,000 (capital); Haifa, 150,000 (chief port).

Monetary unit: Israeli pound.

Israel, the first Jewish state in Palestine since Roman times, came into existence at midnight May 14, 1948, upon expiration of the British League of Nations mandate over Palestine. The new state was immediately plunged into a desperate struggle for existence as Arab forces converged on Palestine from the east, south and north.

Israeli forces, however, not only repulsed these attacks successfully but made important gains. Israel then became securely established in the family of nations, and its government machinery was functioning well in all fields of state activity.

Israel's declaration of independence, promulgated on May 14, 1948, by the Jewish National Council (*Vaad Leumi*), stated that the new nation would be "based on the precepts of liberty, justice and peace taught by the Hebrew prophets." On Feb. 14, 1949, the Constituent Assembly adopted a constitution setting up a republican form of government headed by a president elected for a 5-year term by the Chamber of Deputies. Legislative power is vested in the Chamber of Deputies, the members of which are elected by the vote of all citizens who have reached the age of 21. The government is administered by the cabinet headed by the premier and collectively responsible to the Chamber of Deputies.

Elections held Jan. 25, 1949, divided the 120 seats in the Constituent Assembly as follows: Labor, 46; Socialist Workers, 19; United Religious party, 16; Freedom Movement, 14; others, 25.

The partition plan adopted by the U. N. in Nov., 1947, had awarded three distinct parts of Palestine to the Jews. The northernmost, situated immediately west of the River Jordan and around the shores of the Sea of Tiberias, has Safad and Tiberias as its most important towns, and includes the greater part of the valley of Jezreel. The western and economically most important region lies along the Mediterranean from Haifa and the Plain of Esdraelon in the north to the Rehoboth area in the south and includes the coastal plain of Sharon—the center of Palestine's citrus industry—the port of Haifa, one of the best in the Near East, and the city of Tel Aviv, a growing industrial center. The third region consists of the greater part of the Negeb, the southern desert area with an outlet to the Red Sea at the head of the Gulf of Aqaba. All of these areas had been occupied by Israeli forces by mid-1948 with the exception of part of the Negeb, where further gains were made in the following fall and winter.

In addition, Israel held western Galilee, awarded to the Arabs under the partition plan, and a broad corridor from Tel Aviv to Jerusalem through central Palestine, all of which had been awarded to the Arabs, as well as part of modern Jerusalem, which under the partition plan was to be placed under U. N. trusteeship.

Count Folke Bernadotte of Sweden, official U. N. mediator, proposed modifications to this plan in his final report, presented to the U. N. three days after his assassination. Under this plan all the Negeb would go to the Arabs; all Galilee

(instead of the eastern part only) to Israel; Haifa would become a free port in Israel; the airport at Lydda would be free; Jerusalem would be under U. N. control. Should the Arabs and Israel not agree upon the final demarcation, the U. N. should impose its own settlement.

A final settlement of Israel's frontiers has not yet been agreed upon, but after intermittent fighting in late 1948 and early 1949, Israel and its two chief antagonists, Egypt and Jordan, signed armistice agreements on Feb. 24 and Apr. 3, 1949, respectively.

The constitution characterizes Israel as the national home of the Jewish people and directs the admission of every Jew who desires to settle within its borders, subject to control of the Chamber of Deputies. In 1948, about 130,000 Jews entered Israel, and the average monthly rate of entry in 1949 was over 10,000. During the period of hostilities, more than 600,000 Arabs fled from Israeli-held territory. (See also PALESTINE).

Italy (Republic)

(Repubblica Italiana)

Area: 116,235 square miles.

Population (est. 1949): 46,001,000 (predominantly Italian).

Density per square mile: 395.8.

President: Luigi Einaudi.

Premier: Alcide de Gasperi.

Principal cities (est. 1948): Rome, 1,613,660 (capital); Milan, 1,277,013 (leading financial, industrial center); Naples, 995,257 (seaport); Turin, 719,528 (auto works); Genoa, 657,634 (seaport); Palermo, 470,780 (Sicilian seaport).

Monetary unit: Lira.

Religions: Roman Catholic, 99.6%; others (Protestant, Orthodox, Jewish), .4%.

HISTORY. A former German satellite and later a cobelligerent of the Allies, Italy turned steadily to the West after a crucial national election in April, 1948, in which the Communists and their allies were defeated in their quest for power. The new republic adhered to the North Atlantic Pact in April, 1949, but the Soviet veto still barred it from membership in the United Nations.

About the size of New Mexico but long and narrow in shape, Italy did not exist as a unified country until 1870. Until A.D. 476, when the German Odoacer became head of the Roman Empire in the west, the history of Italy was largely the history of Rome. From A.D. 800 on, the Holy Roman Emperors, the Popes, Normans, Lombards and Saracens all vied for control over various segments of the Italian peninsula. Numerous city states, such as Venice and

Genoa, and many small principalities flourished in the late Middle Ages.

In 1718, after the War of the Spanish Succession, Milan, Naples and Sardinia were handed over to Austria, but the Hapsburg influence on the peninsula was interrupted for a short time after 1800 when Italy was unified by Napoleon, who crowned himself King of Italy on May 26, 1805. After the Congress of Vienna in 1815, Austria continued to be the dominant power in Italy.

The movement for national unity began in the middle 19th century, staged by the "Young Italy" group headed by Giuseppe Mazzini. In 1858 Count Cavour, prime minister under King Victor Emmanuel II of Sardinia, secured the aid of Napoleon III of France in unifying Italy. After French and Sardinian forces had defeated the Austrians in 1859, Lombardy was annexed to Sardinia, and by the time the first Italian parliament opened at Turin in Feb., 1861, all Italy was represented except Venetia, held by Austria, and Rome, which was the territory of the Pope. On February 18, 1861, Victor Emmanuel II was proclaimed King of united Italy.

In 1866 Italy sided with Prussia against Austria and received Venetia; Rome was seized in 1870. In 1882 the young nation entered into the Triple Alliance with Austria and Germany. After war with Turkey in 1911-12, the Italians were awarded Tripoli in North Africa and the Dodecanese islands in the Aegean Sea.

Italy denounced the Triple Alliance on May 3, 1915, and declared war on Austria on May 24. By the treaty of St. Germain, on Sept. 10, 1919, the south Tirol and the Istrian peninsula were awarded to Italy.

In the years immediately following World War I, Italy was a virtual battleground between the Socialists and Benito Mussolini's new Fascist movement. The weak government was powerless to maintain order as the two sides fought for power. Finally, on Oct. 30, 1922, the Fascists staged their "March on Rome" and took over the government. Mussolini was named premier by King Victor Emmanuel III. Il Duce and his Fascist Grand Council soon made Italy into a corporate state, with himself as dictator.

In 1935-36 Italy successfully invaded, conquered and annexed Ethiopia, despite the complaints of the League of Nations and economic sanctions.

On November 6, 1937, Italy joined the German-Japanese anti-Comintern pact and on December 11 withdrew from the League of Nations. The Rome-Berlin Axis was converted into a full military alliance on May 22, 1939. Meanwhile, Italian troops had seized Albania in April, 1939.

WORLD WAR II. On June 10, 1940, Mussolini announced a declaration of war against France (already in the throes of defeat) and Britain. Italian troops were able to advance only a few miles into France before the Armistice was concluded on June 24, under which Italy annexed a small strip of France. On October 28, 1940, Italian forces invaded Greece from Albania, but were driven back by the Greeks, who held a third of Albania by the time the Germans launched their Balkan campaign on April 6, 1941. Italy subsequently occupied parts of Yugoslavia and Greece. Following the German capitulation in North Africa and the fall of Sicily, Mussolini was ousted on July 25, 1943, and Marshal Pietro Badoglio formed a new government. On September 3, 1943, the date of the invasion of the Italian mainland by Allied forces, a military armistice was signed between General Eisenhower and Badoglio, and the legislative and administrative activities of the government were made subject to the approval of an Allied Commission.

On June 9, 1944, five days after the Allies entered Rome, Badoglio was succeeded as premier by Ivanoe Bonomi, a Socialist, who formed a coalition cabinet. The government was recognized by the Allies as the *de facto* government of Italy on October 25, but only as a cobelligerent, not as an ally. Later it was given full legislative powers and the right to resume diplomatic relations.

Upon the collapse of German resistance in the north, Mussolini was tracked down and put to death by partisan forces on April 28, 1945. On December 10, Alcide de Gasperi, a Christian Democrat, took over from Ferruccio Parri, who had succeeded Bonomi as premier in June.

On June 2, 1946, the Italian people voted in favor of a republic, and King Humbert II, who had succeeded his father on May 9, went into exile. De Gasperi remained at the helm, first with a coalition cabinet and later (June, 1947) with a Christian Democrat-Independent government.

The new constitution drafted by the constituent assembly took effect on Jan. 1, 1948. Following the Communist defeat in the elections of April, 1948, De Gasperi formed another coalition cabinet from which the Communist and left-wing Socialist bloc was again excluded. Luigi Einaudi, veteran Liberal leader, was elected first president of the Republic on May 11.

GOVERNMENT. Under the 1947 constitution Italy is a "democratic Republic founded on labor." The president is elected for seven years by parliament in joint session with regional delegates. The cabinet, headed by the premier and nominated by the president, must enjoy the confidence

of parliament, which is composed of the Chamber of Deputies, popularly elected for a five-year term, and the Senate. All citizens are duty-bound to vote.

Articles 115-133 of the constitution introduced a new concept of regional autonomy, dividing the country into 19 regions with locally-elected governments which control regional affairs. Five regions, including the islands of Sicily and Sardinia, enjoy a special degree of autonomy. Below the regions in the governmental organization are the provinces and communes.

The Chamber of Deputies, elected on April 18, 1948, has 574 members, of whom 306 are Christian Democrat, 183 Popular Front (Socialist-Communist coalition), 33 right-wing Socialists, and 52 members of other parties. The Senate has 343 members, 237 of whom are elected by the regions; the other 106 are deputies who were imprisoned during the Fascist regime and former premiers who under the constitution hold their seats for life.

PEACE TREATY OF 1947. The peace treaty which took effect Sept. 15, 1947, required Italian renunciation of all claims in Ethiopia and Greece, the cession of the Dodecanese to Greece, and of five small Alpine areas to France. In addition, the major part of the Istrian peninsula, including Fiume and Pola, went to Yugoslavia. The Free Territory of Trieste was carved out of the area to the west of the new Yugoslav frontier.

Italy was to pay reparations of \$100,000,000 in kind over a seven-year period to the Soviet Union, \$125,000,000 to Yugoslavia, \$105,000,000 to Greece, \$25,000,000 to Ethiopia and \$5,000,000 to Albania; also to make two-thirds restitution for war-time damage to Allied property in Italy.

DEFENSE. The 1947 treaty required Italy to reduce the strength of her army to 250,000 men (including *carabinieri*), the navy to 25,000 (including naval air arm) and the air force to 25,000 (with 350 planes). The fleet was reduced to 2 battleships, 4 cruisers, 20 destroyers and large torpedo boats, plus smaller craft. Major war vessels placed at the disposal of the Big Four included 3 battleships, 5 cruisers, 8 submarines and 13 destroyers and large torpedo boats. Extensive areas along Italy's borders and in the outlying islands were demilitarized.

EDUCATION. Elementary education is free and compulsory from 6 to 14. Elementary schools numbered 37,131 in 1947, with 4,703,228 pupils. The 5,573 secondary schools had 888,993 pupils, while 22 universities and institutions of higher learning had 189,665 students. The University of Rome (founded 1303) had 29,626 stu-

dents; Naples (founded 1224), 31,950; and Milan, 20,002.

RELIGION. Although the country is predominantly Roman Catholic, religious freedom is permitted. Catholic religious teaching is given in all elementary and intermediate schools. Relations with the Church are regulated by the treaty with the Holy See of Feb. 11, 1929, which established the temporal power of the Pope over Vatican City.

AGRICULTURE. Agriculture, the most important branch of Italy's economy, engages more than a third of the population. It is extremely diversified; differences of altitude, soil and climate allow the production of all European crops from rye to rice, from apples to oranges, and from hemp to cotton. Approximately 41,275,000 acres are cultivated. Italy ranks next to France in wine production (average 1931-42: 1,024,000,000 gal.; 1949: 975,000,000 U. S. gal.) and next to Spain in olive-oil production. The silk industry is centered in northern Italy and along the eastern coast. The Italian climate and soil are well suited to fruit growing.

Before World War II the Fascist government carried on a wide land reclamation program, mostly in Emilia, Apulia, and the Venetian provinces.

AGRICULTURAL PRODUCTION 1949

Crop	Acres	Metric tons
Wheat	11,671,000	6,940,000
Rye	244,000	125,000
Barley	618,000	227,000
Oats	1,159,000	415,000
Sugar beets	279,000	3,300,000
Olives	5,469,000*	161,000†

* 1948. † Olive oil.

Livestock and dairy farming are important in Italy. Of the 50-odd varieties of Italian cheese, the best known are the hard parmesan and pecorino (the latter made from ewe's milk) and the soft bel paese and gorgonzola. Cheese production in 1949 totaled 237,000 metric tons. In 1948, Italy had 7,700,000 cattle, 10,500,000 sheep and goats; 3,400,000 hogs, and 60,000,000 poultry. Wool production (1949) was 16,000 tons.

INDUSTRY. Prior to World War II, there were approximately 730,000 industrial establishments in Italy, of which more than 1,000 employed at least 250 workers each. In 1948, approximately 3,250,000 workers were employed in industry. While a large proportion of small and medium sized concerns were common in industry before World War II, there was a growing tendency, fostered by the nature of the corporate state, toward industrial concentration. The textile industry, largest and most important, ordinarily supplied most of the

home markets and left a large margin for export. It made rapid recovery after World War II, accounting for nearly half of the nation's exports. The metal industries are handicapped by lack of coal and of sufficient iron ore reserves. The chemical, clothing and food industries are also important. Industrial production is centered in the north.

Production of steel ingots and castings in 1949 was 2,020,000 metric tons; that of pig iron and ferroalloys, 439,000 tons.

Italy's full participation in the European Recovery Program has had a stimulating effect on the nation's war-shattered economy and has relieved at least partially the food deficits resulting from over-population.

TRADE. Statistics of Italy's foreign trade, in billions of lire, are as follows:

	1947	1948	1949
Exports	339.2	570.6	632.6
Imports	930.6	848.6	867.5

Italy's leading customers by value in 1949 were Argentina, 12 per cent; Britain, 10 per cent; Germany, 8 per cent; France, 6 per cent; and Switzerland, 5 per cent. Principal suppliers were the U. S., 34 per cent; Australia, 6 per cent; Argentina, 5 per cent; and Germany and Britain, each 4 per cent. Chief exports in 1948 were cotton products, 13.2 per cent; fruits and vegetables, 12.3 per cent; artificial fibers (mostly rayon), 11.4 per cent; machinery and apparatus, 10.9 per cent; and vehicles, 7.5 per cent. Leading imports included grain, coal, cotton, wool, and petroleum.

NATURAL RESOURCES. Italy is ordinarily the world's largest producer of mercury; it is also an important producer of sulfur. In 1947 were produced 1,858 metric tons of mercury and 148,432 tons of sulfur. The nation lacks, however, the staple minerals of coal, oil and iron, and is forced to import them. Production of coal and lignite in 1948 was 1,873,200 metric tons; 8,351,392 tons of coal were imported. Building stone, particularly marble, is plentiful. In the south Tirol and the central Apennines, Italy has abundant water power. In 1948, the total power generated was 22,692,000,000 kwh., mostly by hydroelectric plants.

Less than 20 per cent of Italy's area is forested. Principal products are soft and hard timber, charcoal and cork. The fishing industry does not fill domestic needs. Coral and sponges are marketed.

COMMUNICATIONS. According to *Lloyd's Register*, the merchant marine totaled 1,013 steam and motor ships (100 gross tons and over), aggregating 2,442,659 gross tons on June 30, 1949. On April 1, 1950, 53 vessels of 264,722 gross tons were under construction in Italian yards.

There are more than 150 seaports, of which the principal are Genoa, Venice, Savona, Naples and Leghorn. Coastwise traffic is particularly important because of difficult land communications. Railways open to traffic in 1948 totaled 13,000 miles, of which 2,846 miles (1947) were electrified. Highways in 1948 totaled about 105,-800 miles.

FINANCE. Recent data are as follows (in billions of lire):

	1948-49	1949-50*	1950-51*
Revenue	800.8	1,222.8	1,227.0
Expenditure	1,251.8	1,396.9	1,397.0

* Budget estimate.

The total national debt was 2,310,062,-000,000 lire on Dec. 31, 1949, of which 450,000,000,000 lire were consolidated.

TOPOGRAPHY. Approximately 600 of boot-shaped Italy's 708 miles of length are in the long peninsula that projects into the Mediterranean from the fertile basin of the Po River. The Apennines, branching off from the Alps between Nice and Genoa, form the peninsula's backbone, and rise to a maximum height of 9,560 feet at the Gran Sasso d'Italia (Corno). The Alps are Italy's northern boundary.

Several islands form part of Italy. Sicily, 9,926 square miles, lies off the toe of the boot, across the Strait of Messina, with a steep and rock-bound northern coast and gentler slopes to the sea in the west and south. Mt. Etna, an active volcano, rises to 10,741 feet, and most of Sicily is more than 500 feet in elevation. Sixty-two miles southwest of Sicily lies Pantelleria, 45 square miles, and south of that are Lampedusa and Linosa. Sardinia, 9,301 square miles, just south of Corsica and about 125 miles west of the nearest Italian mainland, is largely mountainous, stony and unproductive.

Italy has many northern lakes, lying below the snow-covered peaks of the Alps. The largest are Garda (143 sq. mi.), Maggiore (83 sq. mi.) and Como (55 sq. mi.). The Po, the principal river, rises in the Alps on Italy's western border and flows across the Lombard plain into the Adriatic. The Arno and Tiber Rivers, rising in the Apennines, flow generally westward. Elsewhere are hundreds of short streams.

CLIMATE. Italy's climate is variable. The Italian Riviera along the Gulf of Genoa is subtropical and highly favored by tourists. The winters in the high Apennines are cold and bitter. The western slope of peninsular Italy is warmer than the eastern side, and the Po basin in the north has cold winters and very hot summers. Sicily basks in the warm and equable Mediterranean climate.

In Rome, December through February

are the coldest months (average 47°), and July and August the warmest (75°). There is an abundance of sunshine.

FORMER ITALIAN COLONIAL EMPIRE

Country	Area, sq. mi.	Population (1948)
AFRICA		
Libya	679,183	1,100,000
Eritrea	46,000	1,024,000
Italian Somaliland	194,000	915,000

ASIA

Dodecanese*	1,035	115,913†
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* Ceded to Greece, 1947. † 1947.

The 1947 treaty contained a renunciation by Italy of all right and title to her African possessions. These territories were to remain under British administration pending their final disposal, to be determined jointly by the American, British, French and Soviet governments. These powers failed to reach agreement in Sept., 1948, and the question of disposition was referred to the U. N. General Assembly.

LIBYA—Status: Under temporary U. N. administration pending granting of independence.

U. N. High Commissioner: Adrian Pelt (the Netherlands).

Capitals: Tripoli (Tripolitania) (125,-000), Bengasi (Cyrenaica) (65,000).

Foreign trade (1948): exports, £3,679,097; imports, £3,668,225.

Agricultural products: barley, olive oil, wheat, figs, date palms, tobacco.

Mineral: salt.

Sea products: sponge, tuna.

Libya, lying along the north coast of Africa between Tunisia and Egypt, was a part of the Turkish dominions from the 16th century until 1911. Following the outbreak of hostilities between Italy and Turkey in the latter year, Italian troops occupied Tripoli; Italian sovereignty was recognized the next year by the Treaty of Ouchy. In 1934 the area was organized into four provinces—Bengasi, Derna, Misurata and Tripolitania—which were incorporated in 1939 into Metropolitan Italy, and a military territory in the south, Libyan Sahara (465,362 sq. mi.). Libya was the scene of much desert fighting during World War II. After the fall of Tripoli on Jan. 23, 1943, it came under British military occupation and government. It was divided for purposes of administration into Tripolitania and Cyrenaica, administered by Britain, and the Fezzan in the southwest Sahara, controlled by France.

The U. N. General Assembly voted on Nov. 21, 1949, that Libya as a united state should become independent by Jan. 1, 1952, with interim administration to be carried on by a U. N. commissioner advised by a 10-member council composed of representatives of Egypt, France, Italy, Pakistan,

the U. K. and the U. S. and of Tripolitania, Cyrenaica, the Fezzan and the Libyan minorities.

The area has three natural divisions from the coast inland—the Mediterranean coastland, the only region suitable for agriculture; the sub-desert, and the desert. About 5 per cent of the population is Italian, the remainder native, mostly Moslem. Railroads total 242 miles.

Winters are cool and summers warm along the coast, and hotter in the interior. Bengasi has an average temperature of 55° in January and 78° in July.

ITALIAN SOMALILAND—Status: U. N. trust territory under Italian administration.

Administrator: Giovanni Fornari.

Capital: Mogadiscio (population: 45,000).

Foreign trade (1948): exports, £180,500; imports, £1,113,400.

Agricultural products: dressed skins, cattle, sugar, cotton, cottonseed oil, fruits, bananas.

Forest products: gum, resin, kapok.

Mineral: tin.

Italian Somaliland, extending along Africa's east coast from the Gulf of Aden south to Kenya, fell within the Italian sphere of influence by treaties with the Somali sultans in 1889 and by agreements with Britain in 1905 and 1924, with the sultan of Zanzibar in 1905, and with Ethiopia in 1907. After the conquest of Ethiopia in 1936, the area was incorporated into Italian East Africa. It was occupied in Feb., 1941, by British Imperial troops and, reduced to its pre-1936 area, was placed under British military administration.

Administration was turned over to Italy on Apr. 1, 1950, pursuant to a decision of the U. N. General Assembly on Nov. 21, 1949, under which the area is a U. N. trust territory. Administration is in the hands of Italy for a period of 10 years during which it is to be prepared for independence.

The overwhelming majority of the population are Somalis who belong to the Sunni sect of Islam; they are a pastoral, nomadic people whose livelihood depends on cattle, sheep and camels. However, the Italians (numbering 5,000 in 1948) established plantations in the south, especially in the fertile Juba region. The colony was far from self-supporting, requiring heavy Italian subsidy. The climate is torrid.

ERITREA—Former Status: Italian colony (now under British administration).

Capital: Asmara (population: 85,000).

Foreign trade (1948): exports, £2,300,000; imports, £3,300,000. Chief export: hides and skins.

Agricultural products: coffee, barley, tobacco, sesame, hides, skins.

Minerals: gold, salt, potassium salts.

Sea product: pearls.

The first Italian inroad into Eritrea came in 1870 when the port of Assab and adjacent territory were bought from a native sultan; with British approval, Italian troops occupied Massaua in 1885. By a decree of Jan. 1, 1890, Italian possessions along the Red Sea were united into the colony of Eritrea. In 1936 Eritrea became a part of Italian East Africa. British and Indian troops captured Asmara on Apr. 1, 1941, and Massaua a week later; the area, reduced to its pre-1936 borders, then came under British military administration. The U. N. General Assembly voted on Nov. 21, 1949, to defer decision on its future status, pending investigation by a U. N. commission.

The principal native elements are the Ethiopians and Tigrés, who have close ethnic, linguistic and religious ties with peoples across the border in Ethiopia. Italians in 1947 totaled 26,499. Irrigation is essential in the low-lying coastal plains, and agriculture is practiced largely on the interior plateau (average elevation: 6,500 ft.) where the climate is suitable for European settlement. The pastoral industry engages most of the natives.

Along the coast, the climate is excessively hot and humid, especially in June, September and October; mean annual temperature at Massaua is 86°; the thermometer often rises to 120° in summer.

Japan (Empire) (Nippon)

Area: 146,690 square miles.*

Population (est. 1950): 83,073,518.*

Density per square mile: 566.3.*

Supreme Commander for the Allied Powers: General of the Army Douglas MacArthur (U. S. A.).

Ruler: Emperor Hirohito.

Premier: Shigeru Yoshida.

Principal cities (est. 1947): Tokyo, 4,174,505 (capital and financial, manufacturing center); Osaka, 1,559,310 (chief industrial center); Kyoto, 999,396 (manufacturing); Nagoya, 853,085 (machinery, textiles); Yokohama, 814,268 (seaport, silk-export center); Kobe, 607,202 (seaport, shipbuilding); Fukuoka, 328,586 (seaport, textiles); Niigata, 263,495 (manufacturing).

Monetary unit: Yen.

Language: Japanese.

Religions (1938): Buddhism, 60%; Shintoism, 21%; Protestant (215,166); Roman Catholic (118,856).

* Japan proper.

HISTORY. Japan, first of the aggressor nations which ultimately bound themselves into the Axis to wage World War II, was also the first of the Axis partners to make a semblance of recovery after utter defeat. Although stripped of her empire and under military occupation, Japan made gradual progress toward restoring its smashed

economy. Prospects for a final peace treaty with the Allies, however, still seemed remote in 1950.

Japan's early history is indistinguishable from mythology. One series of legends attributes the creation of Japan to the sun goddess, from whom the later emperors were allegedly descended. The first of them was Jimmu Tennō, supposed to have ascended the throne on Feb. 11, 660 B.C.

Recorded Japanese history begins with the first contact with China in the 5th century A.D. Japan was then divided into strong feudal states, all nominally under the emperor, but with real power often held by a court minister or clan. In 1185 Yoritomo, chief of the Minamoto clan, was designated shogun (generalissimo) with the actual administration of the islands under his control. Clans came and went, but a dual government system—shogun and emperor—persisted till 1867.

First contact with the West came about 1542, when a Portuguese ship off course arrived in Japanese waters. Portuguese traders, Jesuit missionaries, and Spanish, Dutch and English traders followed. Suspicious of Christianity and Portuguese support of a local Japanese revolt, the shoguns restricted all foreigners in 1636-38 except the Dutch, who were confined to Nagasaki. Western attempts to renew trading relations failed until 1853, when Commodore Matthew Perry sailed an American fleet into Tokyo Bay with a letter from President Fillmore. A U. S. commercial treaty signed in 1859 was followed by similar pacts with Britain, France, the Netherlands and Russia, and the opening to foreign residents of the ports of Yokohama, Nagasaki and Hakodate.

Japan now quickly made the transition from a medieval to a modern power. Feudalism was abolished and industrialization was speeded. An imperial army was established with conscription. The shogun system was abolished in 1867 by Emperor Meiji, and parliamentary government was established in 1889. After a brief war with China in 1894-95, Japan acquired Formosa (Taiwan), the Pescadores islands, and part of southern Manchuria. China also recognized the independence of Korea (Chosen), which Japan later annexed (1910).

In 1904-05 the new Japan won prestige by defeating Russia in the Russo-Japanese War, gaining the territory of southern Sakhalin (Karafuto) and Russia's port and rail rights in Manchuria. In World War I Japan, which took a negligible part in military operations, seized Germany's Pacific islands and leased areas in China. The Treaty of Versailles then awarded her a mandate over the islands.

At the Washington Conference of 1921-22, Japan agreed to respect Chinese national integrity. The series of Japanese ag-

gressions which was to lead to the nation's downfall began in 1931 with the invasion of Manchuria. The following year, Japan set up this area as a puppet state, "Manchukuo," under Emperor Henry Pu-Yi, last of China's Manchu dynasty. From then on Japanese policy was attuned to the saber rattling of her militarists. On Nov. 25, 1936, Japan joined the Axis by signing the anti-Comintern pact. The invasion of China came the next year, and the Pearl Harbor attack was unleashed on Dec. 7, 1941.

For many months after Pearl Harbor, the Japanese Army and Navy enjoyed spectacular success, but by the end of 1942 the tide had begun to turn. Three years later the dropping of the world's first atomic bomb in combat on Hiroshima, followed by a second one on Nagasaki, knocked Japan swiftly into a surrender that already had become inevitable.

The formal surrender took place Sept. 2, 1945, aboard the battleship *Missouri* in Tokyo Bay. Southern Sakhalin and the Kurile Islands reverted to Russia, and Formosa (Taiwan) and Manchuria to China. The Pacific islands remained under U. S. occupation.

Soon after the surrender Japan began the process of democratizing its political, social and economic structure under Allied supervision. Early in 1946 the Supreme Allied Commander, General of the Army Douglas MacArthur, ordered Baron Shidehara's cabinet to carry out a series of political purges. Elections held on April 10, 1946 brought 72.1 % of the electorate to the polls, and resulted in a conservative victory. A Liberal, Shigeru Yoshida, took over the premiership on May 22, but his conservative policies brought both Allied and internal dissatisfaction.

Following the Socialists' victory in the elections of April 20, 1947, Japan's first Socialist premier, Tetsu Katayama, a lifelong Christian, formed a cabinet composed of Socialists, Democrats and members of the People's Cooperative party on May 31, 1947. In July, 1947, the U. S. proposed an early conference of the eleven members of the Far Eastern Commission to consider a peace settlement for Japan. The proposal was accepted by all the member nations except the U.S.S.R., which insisted that the treaty be drafted by the four-power Council of Foreign Ministers (China replacing France), thus following the precedent set by the Italian and Axis satellite treaties.

Dissension between the left and right wings of his party forced Katayama's resignation on Feb. 10, 1948. He was succeeded by Hitoshi Ashida, a Democrat leader, on Feb. 21. Ashida yielded to Shigeru Yoshida on Oct. 14, 1948. The latter was renamed premier Feb. 11, 1949, after his Liberal

party won an absolute majority in the January, 1949, elections.

ALLIED OCCUPATION GOVERNMENT. General MacArthur was appointed Supreme Commander for the Allied Powers (SCAP) on Aug. 14, 1945. The surrender terms provided that Japan must accept the provisions of the Potsdam Declaration (July 26, 1945) and that "the authority of the Emperor and the Japanese Government to rule the state shall be subject to SCAP, who shall take such steps as he deems proper to effectuate the surrender."

The Far Eastern Commission—with Australian, Burmese, Canadian, Chinese, British, French, Indian, Dutch, New Zealand, Pakistani, Philippine, Soviet and U. S. delegates—is empowered to form the policies, principles and standards by which the fulfillment of Japanese obligations under the surrender terms may be accomplished, and to review directives issued to SCAP or any action taken by SCAP within the purview of the Commission's jurisdiction. The Allied Council for Japan—composed of SCAP, who is, the U. S. member, a Chinese and a Soviet member and a member representing jointly the United Kingdom, Australia, New Zealand and India—advises and consults with SCAP in carrying out the surrender terms and policies approved by the Commission.

RULER. Emperor Hirohito, born April 29, 1901, succeeded his father, Yoshihito, on Dec. 25, 1926. He was married on Jan. 26, 1924, to Princess Nagako, born in 1903. To them were born two sons, Crown Prince Akihito (Dec. 23, 1933) and Prince Masahito (Nov. 28, 1935), and 5 daughters. Succession is in the male line only.

NATIONAL GOVERNMENT. The new constitution, effective May 3, 1947, made drastic changes in Japan's political system. The Emperor retains only ceremonial functions, and executive power is vested in the cabinet, headed by the premier and collectively responsible to the Diet. Law-making power is vested solely in the Diet, composed of two houses—the House of Representatives, popularly elected for four-year terms, and the House of Councillors, with 250 members elected for six-year terms. A bill of rights guarantees certain basic liberties. Women are enfranchised for the first time. Sovereignty, formerly vested in the Emperor, now is vested in the people, and the House of Representatives can override the veto of the House of Councillors by a two-thirds vote.

The elections of January, 1949, distributed the 466 seats in the House of Representatives as follows (1947 standing in parentheses): Democratic Liberal, 264 (133); Democrat, 68 (126); Socialist, 49 (143); Communist, 35 (4); People's Cooperative party, 14 (31); others, 36 (29).

DEFENSE. The War, Navy, and Munitions Ministries and the Army and Navy General Staffs have been abolished, and the army and navy are completely demobilized. The few remaining major ships in the navy were sunk, and the smaller ships divided among the Allies. The new constitution contains a renunciation of the right to maintain armed forces.

EDUCATION. Article 26 of the 1947 Constitution provides that "all people shall have the right to receive an equal education correspondent to their ability," and that education shall be free and compulsory as provided by law. A 1947 law provided a simplified school structure with 6 years of elementary education (compulsory), 3 of lower secondary, 3 of upper secondary and 4 of university education. Under U. S. supervision the school curriculum has been simplified and purged of militaristic and chauvinistic influences. In 1946-47, Japan had 20,263 elementary schools with 10,546,742 pupils, 29,614 secondary and continuation schools with 7,116,055 pupils, 503 colleges and normal and "higher" schools with 385,173 students, and 49 universities with 91,728 students. Teacher shortage was estimated at more than 100,000 in 1948-49.

POPULATION. The population of Japan proper was approximately doubled from 1870 to 1935. The home islands are now more overcrowded than ever. As of Mar. 1, 1948, SCAP reported that 5,841,699 Japanese civilians and military personnel had been repatriated from all areas. About 95,000 were repatriated from Soviet areas in 1949; Japanese records showed 376,929 still to be repatriated, although the U.S.S.R. claimed that its repatriation program had been completed.

AGRICULTURE. Japan is a land of small rice and silk farms and, except in Hokkaido, the northernmost island, there is almost no large-scale farming and animal husbandry. The average holding is less than three acres. Double cropping makes self-sufficiency possible, but on a very low level of subsistence. Crop production, although hampered by fertilizer shortages, has reached prewar levels, but increased population has made food deficits inevitable.

Japan is the world's largest producer of natural silk. The acreage planted in mulberry trees was sharply reduced during the war with a resultant drop in cocoon and silk production. In 1949, raw silk production was only 9,800 metric tons.

MAJOR AGRICULTURAL CROPS (thousands of metric tons)

Crop	1947	1948	1949
Rice (rough)	11,298	11,992	12,224
Barley	1,157	1,569	1,661
Wheat	767	1,041	1,069
Potatoes	1,936	2,146	2,091

INDUSTRY. Prewar Japan was one of the world's leading industrial nations and the only country in the Far East with highly developed textile, steel, machinery, chemical and electrical industries. The textile industry was dominant, but after 1931 considerable expansion took place in the heavy industries—metal, machinery-building and chemical—which were adaptable to war purposes.

Postwar industrial rehabilitation has proceeded slowly, retarded by labor troubles and deterioration of equipment; the manufacturing index stood at 62 per cent of the 1937 level in April, 1950.

INDUSTRIAL PRODUCTION (monthly averages, thousands of metric tons)

	1947	1948	1949
Pig iron and ferroalloys	31	70	134
Steel ingots and castings	78	143	259
Cotton yarn	10.2	10.2	13.1
Cotton fabrics	46.1*	64.4*	68.6*
Cement	103	154	273

* Millions of square meters.

Directives issued in 1945 effected the dissolution of the huge interlocking monopolies (*Zaibatsu*) in business and finance. Voting rights in the 80 major holding companies and 3,500 subsidiaries were taken over by a government commission which also seized securities held by members of *Zaibatsu* families, for resale to the public.

In 1946, Government-owned arms plants and naval yards and 505 of the largest industrial plants were seized for distribution as reparations in line with the Allied policy of reducing Japan's industrial potential. However, the Allies were unable to agree on the allocation of reparations shares to claimant nations. Limited deliveries were made under an interim program in 1948, but on May 12, 1949, the U. S. announced its opposition to further reparations because they would prevent Japan's recovery to the point of self-sufficiency.

TRADE. Before World War II, Japan ranked fifth in world trade. Exports in 1939 totaled \$928,533,000, and imports \$757,775,000. Foreign trade was resumed on a small scale under strict Allied control in 1946, and in 1947 a program of limited private trade was initiated. Exports in 1949 were \$511,000,000; imports, \$901,700,000. The deficit was financed largely by the United States. Leading customers were the U. S. (16%), India (13%), Britain (8%) and Indonesia (5%). Chief exports in 1948 were cotton fabrics, 35 per cent; raw silk, 8 per cent; silk fabrics, 6 per cent; and machinery, 5 per cent. The U. S. supplied 65 per cent of the imports, of which food ac-

counted for 46 per cent, and raw cotton and other textile fibers, 22 per cent.

COMMUNICATIONS. On Dec. 31, 1939, Japan had 4,084 ships of more than 100 tons, with an aggregate tonnage of 5,728,779. Before World War II the merchant marine carried almost 80 per cent of the foreign trade and was surpassed only by those of the U. S. and Britain. Wartime losses were enormous. On June 30, 1949, there were 1,121 vessels (100 tons and over) with a total tonnage of 1,563,936.

Railway mileage in 1949 was 17,017. The highway system (1946) totaled 534,424 miles.

FINANCE. World War II left Japan with a staggering public debt, mounting inflation and a disorganized financial system. The 1950-51 general budget totaled 661,000,000,000 yen (1949-50: 741,000,000,000 yen). The national debt totaled 524,448,000,000 yen on March 31, 1949.

MINERALS. Japan is relatively poor in minerals. Crude oil production in 1949 in Japan proper was 1,400,500 barrels, about one-third of current domestic requirements. With coal production estimated at 37,970,000 metric tons, the nation was still confronted with a fuel shortage. Other minerals include lead, silver, gold and copper.

FORESTS. Japan is well-wooded, with about 60,000,000 acres of forest. Among forest products are bamboo, charcoal and timber. The wood pulp industry of Japan proper reached an output of 845,000 tons in 1941. Production in 1948 was 451,432 short tons; that of paper was 472,567 short tons. In 1947, 6,256,464,000 bd. ft. of logs and 3,312,408,000 bd. ft. of lumber were produced.

FISHERIES. Fishing, one of Japan's biggest industries, provides a staple food and considerable exports in normal years. The prewar fishing fleet of 356,462 vessels ranged from Alaska to the South Seas. The 1948 catch was 2,200,000 short tons.

TOPOGRAPHY. Japan's four main islands are Honshu, Hokkaido, Kyushu and Shikoku. The Ryukyu chain to the southwest is U. S. occupied and the Kuriles to the northeast are Russian occupied. The surface of the main islands consists largely of mountains separated by narrow valleys. There are about 50 more or less active volcanoes, including famous Fujiyama near Tokyo (12,385 ft.). Earthquakes are frequent. Japan has many rivers, broken by shallows and rapids, and navigable usually for flat-bottomed boats.

CLIMATE. The Japanese climate ranges from subtropical in its southern extremes, to winter cold and snow in Hokkaido. The winter temperatures are moderated in the central islands by the Japan Current. Mean annual temperature in Tokyo is 56°.

Jordan (Hashemite Kingdom of)

Area (est.): 35,000 square miles.
Population (est. 1946): 370,794 (mostly Arab)*.

Density per square mile (est.): 10.6†
Ruler: King Abdullah ibn Hussein.
Prime Minister: Said Pasha el-Mufti.
Principal city (est. 1948): Amman, 60,000 (capital).

Monetary unit: Jordani dinar.
Language: Arabic.
Religions: Moslem (Sunni), except about 30,000 native Christians and 7,000 Circassians.

* Nomadic tribes of desert not included.

† Excluding Arab Palestine.

HISTORY. Jordan, once the Lordship of Oultre-Jourdain in the Latin Kingdom of Jerusalem, attracted world-wide attention in 1948 when its king, Abdullah, led Arab forces in the invasion of Palestine from the east. An ancient land, about the size of Indiana, the small kingdom was known in the time of Moses as Edom and Moab. It passed to the Amorites of Damascus and in A.D. 106 became part of the Roman province of Arabia. In 633-36 it was conquered by the Arabs, and a period of decline and depopulation ensued.

Conquered by the British in World War I, Jordan was separated from the Palestine mandate in 1920, and placed in 1921 under the rule of Abdullah ibn Hussein. In 1923 Britain recognized Jordan's independence, subject to the mandate. During World War II, Jordan co-operated completely with Britain. On March 22, 1946, Britain abolished the mandate and recognized the full and complete independence of Jordan. That part of Palestine occupied by Jordani troops was formally incorporated by action of the Jordani parliament on Apr. 24, 1950.

GOVERNMENT AND DEFENSE. Jordan is a constitutional monarchy. The king rules with the aid of a cabinet of department heads responsible to him. The parliament consists of the popularly elected chamber of deputies of 40 members and the senate of 20 appointed members. Arab Palestine is represented in both bodies.

King Abdullah (born 1882) is the second son of the late King Hussein of the Hejaz and the uncle of King Faisal II of Iraq. He is head of the Hashemite family which ruled part of Saudi Arabia until its expulsion by King Ibn Sa'ud.

Defense of the country is entrusted to the British-trained Arab Legion of about 10,000 men, the most effective force among all Arab armies. The Anglo-Trans-Jordanian treaty of March 20, 1948, replacing that of March 22, 1946, has mutual assistance provisions and permits Britain to maintain air force units. Jordan receives

an annual defense subsidy of £3,000,000 from Britain.

SOCIAL AND ECONOMIC CONDITIONS. Life in Jordan is primitive; there are estimated to be 50,000 nomads and 120,000 seminomads. At least 95 per cent of the total area is deserted. Illiteracy is widespread; in 1948 the 175 schools had 15,201 pupils.

Most of the country is suitable only for pasturing sheep, goats and camels. Cultivated land is limited to a relatively small area west of the Hejaz Railway. In the drier cultivated areas of the plateau, the inhabitants retain tribal organization and still live in tents. Foreign trade is limited to the exchange of wheat, fresh fruit, wool and live animals for sugar, tea, and other necessities. Exports and re-exports in 1948 were £P2,511,271; imports, £P11,539,950. Transit of crude oil amounted to £P706,313.

Despite the sparse settlement of the country, Jordan has good roads (1948: 360 mi. paved) to Palestine, Syria and Iraq. It is crossed from north to south by the Hejaz Railway.

The 1948 budget (excluding subsidies) placed revenue at £P2,326,401 and expenditure at £P2,390,203.

TOPOGRAPHY AND CLIMATE. Jordan is mainly a plateau with an average altitude of 3,000 feet, sloping gently eastward. The western edge is a steep slope overlooking the Rift Valley (Jordan River, Dead Sea and Wadi el Araba) 3,000-4,000 feet below. In the south are mountains over 5,000 feet high and a sandstone area cut by deep canyons. The country borders on the Red Sea for a few miles in the southwest. The subtropical steppe and desert have wet cold winters and dry hot summers. Rainfall near the escarpment decreases from about 26 inches in the north to 10 inches in the south. Average maximum temperature in August is 92°; average minimum in January is 39°.

Korea (Chosen)

Area: 85,225 square miles.
Population (est. 1949): 29,238,641 (almost entirely Korean).

Density per square mile: 343.1.

President: Dr. Syngman Rhee.

Principal cities (est. 1949): Seoul (Kyongsong), 1,446,049 (capital); Fusan (Pusan), 473,619 (chief seaport); Pyongyang, 450,000 (northern industrial center); Taegu, 313,705 (silk center); Inchon, 265,767 (seaport).

Monetary unit: Won.

Languages: Korean, Chinese, Japanese.

Religions: Buddhist, Confucianist, Taoist, Christian (500,300 Christians in 1938).

HISTORY. Korea, a peninsula about 600 miles long extending out from Asia be-

tween the Yellow Sea and the Sea of Japan, became an international battleground in 1950 when Communist troops of North Korea invaded The U. N.-recognized Republic of South Korea below the 38th parallel.

According to legend which may be partly historical, a Chinese sage named Kija founded the kingdom of Chosun ("Morning Calm") in 1122 B.C. and thus began a dynasty which lasted until 193 B.C. In 108 B.C. Korea was annexed to China, and later divided into three small principalities which formed the kingdom of Silla. Silla revolted in A.D. 918 and declared its independence. In 1592 the Koreans defeated a Japanese fleet and, with Chinese help, ousted the Japanese invaders from their land. In 1627, the Manchus seized Korea and placed it again under Chinese sovereignty. In the Chinese-Japanese War of 1894-95, Japan won predominant influence in Korea, and in 1905 reduced it to a protectorate. In 1910 Japan formally annexed Korea. A Korean bid for independence was crushed ruthlessly in 1919.

In Aug., 1945, at the end of World War II, Korea was occupied by Soviet and U. S. troops. The United States, United Kingdom and Soviet Union agreed at Moscow in Dec., 1945, that Korea should be placed under the trusteeship of those three powers and China for a period not to exceed five years and that, as the first step toward Korean independence, the U. S. and Soviet commanders should meet as soon as possible to agree upon the formation of an all-Korean provisional government. Agreement proved to be impossible. The U. S. referred the matter to the U. N. General Assembly, which set up a commission in November, 1947, to arrange for Korean elections and to aid in the formation of a government. The U.S.S.R. boycotted the commission's meetings, but elections were held for a national assembly in the U. S. zone on May 10, 1948, with seats left vacant for Soviet zone delegates. The assembly met for the first time on May 31, and on July 12 adopted a constitution setting up a one-house National Assembly with a government headed by a president. On July 20 Dr. Syngman Rhee was elected president by the Assembly, and on Aug. 12 the new Republic was recognized by the U. S. and China. It was also recognized as the legal government of Korea by the U. N. General Assembly on Dec. 12, 1948. Funds were made available to the new state under the ECA program.

On May 1, 1948, formation of a North Korean "People's Republic" in the Soviet zone north of the 38th parallel was announced. It claimed jurisdiction over all Korea and was a typical Soviet state under a constitution adopted Sept. 2, 1948, by a "People's Assembly." Soviet forces

were withdrawn from north Korea late in 1948; at Korean request some U. S. forces remained in the south until June, 1949.

On June 25, 1950, South Korea was attacked by North Korean Communist forces. U. S. armed intervention was ordered on June 27 by Pres. Truman and on the same day the U. N. invoked military sanctions against North Korea. Gen. Douglas MacArthur was named commander of U. N. forces on July 7. U. S. and South Korean troops fought a heroic holding action, but by the first week of August, they had been forced back to a 4,000 sq. mi. beachhead in southeast Korea. There they stood off superior north Korean forces until Sept. 15, when a major U. N. amphibious attack was launched far behind the Communist lines at Inchon, port of Seoul. By Sept. 30, U. N. forces were in complete control of South Korea; they then invaded North Korea.

SOCIAL AND ECONOMIC CONDITIONS. In 1947, there were 2,177,980 pupils in elementary schools, 158,325 in secondary schools, and 13,417 in higher schools. Less than half the population of school age (6 to 12) was in school at the beginning of 1949. There is a university at Seoul.

The Korean population is more or less homogeneous and successfully withstood Japanese efforts to assimilate it. South Korea has 43 per cent of the peninsula's area and over two-thirds of its population.

Korea, predominantly agricultural, cultivates about 12,000,000 acres. Chief products are rice, barley, oats, rye, millet, soybeans, tobacco, cotton and wheat. The 1949 rice crop in South Korea was about 2,956,000 tons. The political division of Korea destroyed its former self-supporting economy.

Industrial development was speeded in the last years of Japanese rule. The leading industries by value of output ordinarily are chemical, textile, food, beverage and tobacco. Korea north of the 38th parallel has by far the larger portion of the country's industry and abundant hydroelectric resources.

Korea's prewar foreign trade was closely linked with that of Japan. South Korea's postwar trade has been largely on a government-to-government basis, with most of the imports financed by U. S. funds. Such trade in 1948 included \$179,593,000 in imports and only \$8,865,000 in exports. Imports were principally foodstuffs, fertilizers, petroleum, coal and machinery. Exports consisted largely of tungsten ores and concentrates, graphite, marine products and ginseng.

Land communications, well developed by the Japanese for strategic reasons, included (1944) 3,115 miles of railway and (1940) 17,011 miles of highway.

The 1950-51 budget for South Korea estimated revenue at 50,800,000,000 won and expenditure at 89,200,000,000 won, with most of the deficit to be covered by U. S. aid. The 1950-51 budget for North Korea estimated revenue at 25,200,000,000 won and expenditure at 26,700,000,000 won.

Korea's best mining regions are in the north. Leading products are coal, gold, silver, copper, tungsten ore, iron ore, graphite, lead, alum stone and pyrite ore.

Despite Japanese exploitation, considerable Korean forest areas remain, especially in the north. Most of the fishing companies were Japanese-owned before 1945.

TOPOGRAPHY AND CLIMATE. Korea's coast, with a rugged mountain range along the east, is fringed with more than a thousand islands. Several rivers are navigable for more than a hundred miles, including the Rakuto in the south, the Kan in the central region and the Yalu in the northwest, on the Manchurian border. The climate is equable, about like that of the eastern United States. Annual rainfall is about forty inches.

Latvia

Area: 25,395 square miles.

Population (est. 1940): 1,994,506 (Let-
tish, 75.5%; Russian, 12%; German, 3.2%;
Polish, 2.5%; others, 6.8%).

Density per square mile: 78.5.

Principal cities (est. 1939): Riga, 393,211
(capital); (est. 1935): Liepaja, 57,098 (sea-
port).

Language: Latvian.

Religions (census 1930): Lutheran,
56.6%; Roman Catholic, 23.7%; Greek Or-
thodox, 8.9%; others, 10.8%.

Descended from ancient Aryan stock, the Latvians were early tribesmen who settled along the Baltic Sea and, lacking a central government, fell an easy prey to more powerful peoples. The German Teutonic Knights first conquered them in 1158 and ruled the area as two states—Livonia and Courland. Poland conquered the territory in 1562 and ruled until 1795 in Courland; control of Livonia was disputed between Sweden and Poland from 1562 to 1629. Sweden controlled Livonia from 1629 to 1721. Russia took over Livonia in the latter year, and Courland after the third partition of Poland in 1795. From that time until 1918, the Latvians remained Russian subjects, although they preserved their language, customs and folklore. The Russian Revolution of 1917 gave them their opportunity for freedom, and the Latvian Republic was proclaimed on Nov. 18, 1918.

The republic lasted little more than 20 years. It was occupied by Russian troops in 1939 and incorporated into the U.S.S.R. in 1940. German armies occupied the na-

tion from 1941 to 1943-44, when they were driven out by the Russians. Most countries, including the U. S., have refused to recognize the Soviet annexation of Latvia.

Lebanon (Republic)

Area: 3,475 square miles.

Population (est. Dec. 31, 1949): 1,246,580
(Arabian, Armenian, Circassian, Turk).

Density per square mile: 358.7.

President: Sheik Bishara el Khoury.

Prime Minister: Riyad el Solh.

Principal cities (est. 1949): Beirut, 400,-
000 (capital, chief port); Tripoli, 100,000
(oil pipe-line terminus).

Monetary unit: Lebanese pound (£L).

Languages: Arabic, French.

Religions: Maronite, Greek Orthodox,
Greek Catholic, Mohammedan.

HISTORY. Smaller than Connecticut, Lebanon lies at the eastern end of the Mediterranean, between Palestine and Syria. In ancient times it was the mountainous hinterland of the Phoenician coast towns. From the 7th to the 11th centuries there infiltrated into southern Lebanon the heretics of Islam who finally coalesced into the Druse community.

In the 19th century the Turkish Sultan-
ate encouraged the Druses to wage civil
war against the Christian Maronites. After
a massacre of 2,500 Christians in 1860,
Lebanon was occupied by the French for
a year. From 1864 to 1914, a Christian mili-
tary government ruled the area under
nominal Turkish sovereignty. After World
War I, France received a League of Na-
tions mandate over Syria and Lebanon.
The French drew a Lebanese border in
1920 to offset predominantly Moslem Syria
and proclaimed the area a republic under
French control on May 23, 1926.

Vichy forces controlled Lebanon after
the fall of France in 1940, but the Allies
replaced them by July 14, 1941. Despite
Syrian objections, the French permitted
Lebanon to declare its complete independ-
ence on Nov. 26, 1941. Lebanon joined the
Arab League and took part in the invasion
of Palestine on May 15, 1948.

GOVERNMENT. The modern Lebanese re-
public is governed by a president elected
by parliament, for a six-year term, and
a cabinet of ministers appointed by the
president, but responsible to parliament,
which has 55 members. An independent
army has been formed, based on a cadre of
native *troupes spéciales*, formerly part of
the French army in the Levant. The last
French troops were evacuated late in 1946.

SOCIAL AND ECONOMIC CONDITIONS.
In 1946-47, there were 171,482 students at-
tending various state, Moslem, Christian,
private, French, American and British

schools. Beirut has two universities. Christians are in the majority in Lebanon.

Lebanon produces tobacco, olives, grapes and other fruits, wheat and silk. Manufacturing is confined mainly to local consumers' goods. The silk industry is important in Beirut and Tripoli; cocoon production averages about 6,000 tons annually. Tobacco manufacturing is a government monopoly. The only available foreign trade statistics are combined with those of Syria. The customs union between the two countries was, however, dissolved in March, 1950. Beirut, the chief port, ships out silk, fruit and carpets, and imports machinery, tin plate and textiles.

A rail line links Beirut with Damascus and Syria. Another, built in World War II by Allied engineers, runs from Tripoli to the Palestine border, and is part of a line from Cairo to Istanbul, via Haifa in Palestine. One of the oil pipelines from the Kirkuk field in Iraq terminates in Tripoli.

The 1950 budget balanced revenue and expenditure at £L85,300,000. There is no public debt.

Iron ore deposits are worked in the south, and building stone and marble are plentiful. The country also has thick deposits of inferior lignite coal.

TOPOGRAPHY AND CLIMATE. The topography is varied. There is a narrow coastal plain, and the steep Lebanon Mountains reach heights of approximately 10,000 feet. There are no large streams. Lebanon has hot dry summers (about 80° in Beirut) and cool rainy winters (50°-60° in January).

Liberia (Republic)

Area: c.43,000 square miles.

Population (est. 1949): 1,600,000 (Native Negro, 99%; American Negro, .8%; white, .1%; others, .1%).

Density per square mile: c.37.2.

President: William V. S. Tubman.

Principal city: Monrovia (est. pop. 10,000; capital and chief port).

Monetary unit: U. S. dollar.

Languages: English (official), native tongues.

Religion: Protestant Christian (official); Mohammedan, Catholic, Pagan.

HISTORY. The history of Liberia, Africa's only republic, dates from 1816, when the American Colonization Society received a charter from the U. S. Congress, authorizing it to send emancipated Negro slaves to the west African coast.

The first settlers, who were led by Jehudi Ashmun, landed in 1822 at Cape Mesurado near the present site of Monrovia. White governors, named by the society, administered Liberia until 1841. On July 26, 1847,

independence was proclaimed, and the first president was Joseph J. Roberts, a Virginia octoroon of considerable ability.

After 1920 considerable progress was made toward opening Liberia's interior, but even today only about 100,000 of its inhabitants are regarded as civilized, and lack of transportation hampers development of the heavily forested inland. In 1942, a U. S.-Liberian agreement admitted U. S. troops to build strategic airports.

In 1944 an agreement provided for permanent U. S. military and naval bases.

GOVERNMENT. The government is modeled after that of the United States. The president and vice president are popularly elected for eight years. The 27-member House of Representatives is elected for four years and the ten-member Senate for six years. Suffrage is extended only to landowners over 21 who are of Negro blood, but a 1946 constitutional amendment provides for the seating in the House of an aborigine from each province in the hinterland. Liberia's army of about 4,000 men is organized on a militia basis.

SOCIAL AND ECONOMIC CONDITIONS. Education, compulsory in theory, is conducted in 200 schools, about half state and half mission. Attendance is about 16,000. There are six state high schools, a normal school, a state college and the Booker T. Washington Industrial and Agricultural Institute, supported by U. S. donations.

The English-speaking descendants of U. S. Negroes, known as Americo-Liberians, are the intellectual and ruling class. The aborigines, virtually all uncivilized, are divided into some 28 tribes speaking different dialects. Some are Moslems or pagans. Christians include Anglicans, Methodists, Catholics, Baptists and Presbyterians. There are a number of foreign missions.

Agriculture, on a crude level, is the principal means of livelihood for the tribal Liberians, who raise coffee, rice, sugar cane and cassava. Manufacturing is non-existent except for small native industry, and the country's only big enterprise is the million-acre concession granted in 1925 to the Firestone Plantations Company for rubber cultivation. Production averages 22,000 tons annually. A large iron-ore concession is being developed in the Bomli Hills area by U. S. interests.

Most of the trade is with the United States. Domestic exports in 1949 totaled \$15,412,115, of which 79 per cent was rubber, 15 per cent palm kernels and oil, and 3 per cent gold. Imports were \$11,821,606, mostly textiles, machinery, vehicles, petroleum and food. The U. S. supplied 71 per cent of the imports and took 82 per cent of the exports.

Liberia has no railroads. Coastwise communication is supplied by Pan American

Airways. Interior travel is by foot with native bearers. In 1939 there were less than 300 miles of roads, but U. S. troops built considerably more. There are no harbors except a port and naval base completed in 1947 at Monrovia, with U. S. assistance, at a cost of more than \$19,000,000.

Finances are under U. S. supervision. The country's recent fiscal record is excellent. Actual revenue in 1949 was \$3,815,834; expenditure, \$3,547,470. The external debt on Dec. 31, 1949, was only \$566,000; the internal debt, \$4,700.

TOPOGRAPHY AND CLIMATE. Liberia, about the size of Ohio, has a 350-mile frontage on the west coast of Africa, between the Ivory Coast and Sierra Leone. Its only well developed area is a low coastal strip running inland about seven miles. Beyond that is a low plateau, some of it mountainous, traversed by many rivers, of which the Cavalla (Kavalli) and the St. Paul's are the most important. The climate is tropical throughout, with rainfall up to 150 inches a year on the coast.

Liechtenstein (Principality)

Area: 65 square miles.
Population (est. 1948): 13,000 (mostly German).
Density per square mile: 200.0.
Ruler: Prince Franz Joseph II.
Chief of Government: Alexander Frick.
Principal city (est. 1948): Vaduz, 2,650 (capital).
Monetary unit: Swiss franc.
Language: German.
Religion: Roman Catholic.

Tiny Liechtenstein lies on the east bank of the Rhine, just south of Lake Constance, between Austria and Switzerland. It abolished its army in 1868 and has managed to stay neutral and undamaged in all European wars since that date.

Founded in 1719, Liechtenstein was made up of the Lordships of Vaduz and Schellenburg, immediate fiefs of the Holy Roman Empire. In 1806 it joined the Rhine Federation and in 1815 the German Confederation. It became independent in 1866. Franz Joseph II, the reigning prince, was born in 1906, and succeeded his great uncle, Franz I, in 1938. In 1943 he married Countess Gina Wilczek, of Austria.

The constitution of 1921 provided for a legislature, the *Landtag*, of 15 members elected by direct, universal suffrage. Liechtenstein adopted Swiss currency in 1921, and has been part of the Swiss Customs Union since 1924. Its foreign trade statistics are included in those of Switzerland, which also administers the country's telegraph and postal service.

Wheat, wine and fruit are the chief products. There are small manufactures of cotton, leather and pottery. The country's taxes are quite painless. For many years it had no debt, but at the beginning of 1950, the debt was 6,516,878 fr. Revenue in 1950 was estimated at 4,451,200 fr.; expenditures, at 4,775,949 fr. In 1947, there were 14 elementary and 3 continuation schools, with total enrollment of 1,700.

Liechtenstein's area includes low valley land and upland peaks—Falkais at 8,401 feet, and Naafkopf, 8,432 feet. The chief mineral product is marble.

Lithuania

Area: 22,958 square miles.
Population (est. 1940): 2,879,070 (Lithuanian, 81%; German, 4%; Polish, 3%; Russian, 2%; others, 10%).
Density per square mile: 125.4.
Principal cities (est. 1942): Vilnius (Vilna), 182,000 (capital); (est. 1941) Kaunas, 120,000 (river port).
Language: Lithuanian.
Religions: Roman Catholic, 80%; Lutheran, 5.5%; others, 14.5%.

Southernmost of the three Baltic states, Lithuania in the middle ages was a grand duchy joined to Poland through royal marriage. Poles and Lithuanians merged forces to defeat the Teutonic Knights of Germany at Tannenberg in 1410 and extended their power far into Russian territory. In 1795, however, following the third partition of Poland, Lithuania fell into Russian hands and did not gain its independence until 1918, toward the end of World War I.

The republic was occupied by the U.S.S.R. in 1939 and annexed outright the following year. From 1940 to 1944 it was occupied by German troops and then was retaken by the Soviet Union. Western countries, including the U. S., have not recognized the Russian annexation.

Luxemburg (Grand Duchy)

Area: 999 square miles.
Population (census 1947): 286,786* (Luxemburgian, French, German).
Density per square mile: 287.0*.
Ruler: Grand Duchess Charlotte.
Premier: Pierre Dupong.
Principal city (census 1947): Luxembourg, 61,590* (capital; iron and steel).
Monetary unit: Luxembourg franc.
Languages: Luxemburgian, French, German.
Religion: Mainly Roman Catholic.

* Population actually present at time of census.

HISTORY. Luxemburg is a small buffer state between France, Germany and Belgium. Invaded and occupied in both World War I and II despite the fact that its neu-

trality was guaranteed, Luxemburg suffered most in the latter war, when the Nazis deported several thousand natives as slave labor.

Sigefroi, Count of Ardennes, an offspring of Charlemagne, was Luxemburg's first sovereign ruler. In 1060 the country came under the rule of the House of Luxemburg. From the 15th to the 18th centuries, Spain and Austria held it in turn. The Congress of Vienna in 1815 made it a Grand Duchy and gave it to William I, King of the Netherlands. In 1839 the Treaty of London ceded the western part of Luxemburg to Belgium.

After the Nazi invasion on May 10, 1940, the government fled the country, returning in 1944 after Allied troops had liberated it. A claim for 225 square miles of German territory was made in 1946. In 1948 the grand duchy abandoned its policy of perpetual unarmed neutrality and joined the Western European Union; in April, 1949, it adhered to the North Atlantic Pact.

GOVERNMENT. Luxemburg is a constitutional monarchy with the crown hereditary in the House of Nassau. The present heir to the throne is Prince Jean, born Jan. 5, 1921. The constitution of 1868, as amended in 1919, provides for democratic government through a chamber of deputies of 51 members, popularly elected for six-year terms. The constitution leaves to the sovereign the right to organize the government, which consists of a minister of state who is president of the government (premier) and at least 3 other ministers. There is also a council of state of 15 members, chosen for life by the sovereign.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory for all children between the ages of 6 and 13. The common or idiomatic language is *letzeburgesch*; German and French are also spoken. Labor unions are strongly organized into a single large federation.

Although the soil is not very fertile, agriculture is prosperous. Principal crops are potatoes, oats, wheat, rye and grapes. Wine production in 1949 was 550,000,000 U. S. gal.

The mining and metallurgical industries, based on iron ore found in the south, are the most important. In 1949, an average of 22 blast furnaces employed 18,679 workers and produced 2,271,858 metric tons of pig iron. Production of steel ingots was 2,372,080 tons. Other main industries include brewing, sparkling wine, leather, textiles and cement.

Normally, Luxemburg has little unemployment, almost no illiteracy and such low taxes that many foreign holding companies maintain legal headquarters there to escape high taxation in other countries.

By a customs union between Belgium and Luxemburg which came into force on May 1, 1922, to last for 50 years, customs frontiers between the two countries were abolished. On Jan. 1, 1948, an economic union with Belgium and the Netherlands (Benelux) came into existence. Luxemburg's foreign trade figures are included in those of Belgium and no separate statistics are available; exports consist chiefly of iron and steel products.

Transportation facilities in 1947 included 340 miles of railway and 2,673 miles of highway, of which 1,320 miles were improved.

Actual government revenue in 1949 was 3,105,931,000 fr.; actual expenditure, 3,383,052,000 fr. The consolidated debt on Dec. 31, 1949, was 2,029,082,000 fr.; the floating debt, 4,548,787,000 fr. on Oct. 1, 1949.

Luxemburg's prosperity depends largely on its rich iron ore mines, which produced 4,138,247 metric tons in 1949; exports were 1,549,462 tons.

Mexico (Republic)

(Estados Unidos Mexicanos)

Area: 758,061 square miles.

Population (est. June 30, 1949): 24,448,000 (mestizo, 55%; Indian, 29%; white, 15%; others, 1%).

Density per square mile: 32.3.

President: Miguel Alemán.

Principal cities (est. 1948): Mexico City, 1,972,351 (capital); Guadalajara, 280,131 (manufacturing and distributing center); Monterrey, 250,829 (metallic industries); Puebla, 159,383 (cotton textile center); Mérida, 113,389 (sisal).

Monetary unit: Peso.

Language: Spanish, 86%; Indian, 14%.

Religion: Predominantly Roman Catholic.

HISTORY. Mexico is four times the size of Spain, the source of its cultural heritage, and one-fourth the size of the United States, the source of its modern industrial trend. In recent times the nation has steered moderately leftward in deference to the needs of its millions of peasants.

Mexico's early history is shrouded in mystery, but at least two highly civilized races—the Mayas and later the Toltecs—preceded the wealthy Aztec empire conquered in 1519–21 by the Spanish under Hernando Cortez. Spain ruled for the next 300 years until 1810 (the date was Sept. 16 and is now celebrated as Independence Day), when the Mexicans first revolted. They continued the struggle and finally won independence in 1821 by the Treaty of Córdoba.

Turbulent years followed. From 1821 to the first presidency of Porfirio Díaz in 1877, there were two emperors, several

dictators and enough presidents and provisional executives to make a new government on the average of every nine months. Mexico lost Texas (1836), and after defeat in the war with the United States (1846-48) it lost the area comprising the present states of California, Nevada and Utah, most of Arizona and New Mexico, and parts of Wyoming and Colorado.

In 1855 the Indian patriot Benito Juárez began a series of liberal reforms including the disestablishment of the Catholic Church, which had acquired vast property. A subsequent civil war was interrupted by the French invasion of Mexico (1861), the crowning of Maximilian of Austria as emperor (1864), and then his overthrow and execution by forces under Juárez, who again became president in 1867.

During the rule of the dictator Porfirio Díaz (1877-80 and 1884-1911) the country was freed from political strife, made substantial economic progress, and gained a respected position in foreign affairs. But Díaz' reactionary land policy led to revolution and his resignation in 1911. The next few years were marked by bloody political-military strife, and trouble with the United States culminating in the punitive expedition into northern Mexico (1916-17) in unsuccessful pursuit of the bandit-politician Pancho Villa. President Venustiano Carranza, who had shown pro-German sympathy in World War I, was assassinated in 1920, and was succeeded by General Alvaro Obregón.

President Plutarco Elías Calles (1924-28) largely abandoned Obregón's reforms, and Obregón, re-elected in 1928 on a radical agrarian and anti-clerical platform, was assassinated by a religious fanatic before he could take office. There followed a series of Calles puppets who ruthlessly suppressed labor and farm organizations. General Lázaro Cárdenas (1934-40), backed by the National Revolutionary Party (PRM), began a socialist program of land distribution to peasants, government seizure of foreign-owned oil lands, and broad labor reforms. General Manuel Avila Camacho, president during World War II, co-operated closely with the United Nations and followed Cárdenas' policy at home.

In July, 1946, Miguel Alemán was elected president, backed by the Avila Camacho administration and the PRM. It was the most peaceful election in Mexican history. Alemán, like his predecessor, pursued the internal policy initiated by Cárdenas; his administration has been marked by continued cordial relations with the United States.

GOVERNMENT. The president, popularly elected for six years and ineligible to succeed himself, governs with a cabinet of his appointed ministers. The Federal Con-

gress has two houses—the 147-member Chamber of Deputies, elected for three years (one for each 150,000 population) and the 58-member Senate, elected for six years with two senators from each of the 28 states and two from the Federal District (Mexico City). All married male citizens at least 18, and all single male citizens at least 21 are eligible to vote.

Each of the 28 states has considerable autonomy, with a popularly-elected governor, legislature and local judiciary. The president appoints the governors of the three Federal territories, and the governing body of the Federal District.

Military service is compulsory, and the president holds supreme command of the armed forces, through the Secretary of War. The national army, greatly modernized during World War II, numbered about 50,000 men in 1950; the air force had 250 planes and two U. S.-trained squadrons. The small navy consists of six sloops, about 20 coast guard vessels and other minor craft.

EDUCATION. Illiteracy is one of Mexico's big problems, and the government is trying hard to reduce the rate, estimated at 30 per cent in 1948, as against 60 per cent in 1930. Education is free, compulsory from 6 to 16, separated from the church, and under Federal control. There were about 24,625 primary schools in 1949 with an enrollment of 2,997,198. The 466 general secondary schools had 80,598 students. The 12 universities had 35,602 students; about 22,000 attended the University of Mexico at Mexico City.

RELIGION. About 90 per cent of Mexicans are Roman Catholics, but all religions are tolerated. The 1857 Constitution separated church and state. The church cannot acquire property, and its present holdings are deemed to belong to the state. Priests, who must be Mexican-born, cannot take part in politics.

GOVERNMENT CONTROL. Federal control of the national economy is increasing steadily in Mexico. The government regulates farm production, fixes prices, and controls both exports and imports. Since 1915 it has consistently broken up large estates for distribution to the poor on state-owned communal farms. In 1941, title to the land began to pass to the peasants themselves. The right to strike, maximum hours, minimum wages and a social security system—all these have been established by the government.

AGRICULTURE. Primitive agricultural methods are steadily giving way to modern practices. More than 17,000,000 acres are under cultivation. About 2,775,000 acres are irrigated, but the eventual total of watered land is expected to be 12,000,000

acres. About 10 per cent of the annual budget is earmarked for irrigation projects. Approximately half the arable land is planted to corn—a staple item in the national diet. The Yucatán peninsula, at the southern end of the Gulf of Mexico, raises more than half of the world supply of sisal hemp (123,000 tons in 1948). Agriculture and grazing accounted for 15 per cent of the national income in 1946.

Production of principal crops was as follows in 1948 (metric tons): corn, 2,831,-937; sugar cane, 9,558,819; potatoes, 127,-998; oranges, 400,231; coffee, 53,165; tobacco, 35,494; wheat, 477,000; rice, 163,000; cottonseed, 200,000; cotton, 124,000. Sugar production totaled 635,000 tons.

Stockraising is important on non-arable land. Mexico's inventory of livestock in 1949 showed 13,217,00 cattle, 4,965,000 sheep, 2,722,000 horses, 2,636,000 asses, 1,225,000 mules and 5,704,000 hogs.

A rather serious epidemic of hoof-and-mouth disease broke out among Mexican cattle in 1947. A joint U. S.-Mexican campaign to destroy all diseased and exposed cattle led to peasant opposition amounting in some cases to insurrection, but the campaign continued.

INDUSTRY. Considering its cheap labor, abundant raw materials and available water power, Mexico is still industrially backward. However, steady expansion is taking place.

Total value of industrial production in 1948 was 3,920,817,000 pesos, of which cotton yarn and cloth accounted for 21.0 per cent; sugar, 12.4; flour, 7.7; beer, 7.5; iron and steel, 6.3; soap, 5.8; and cigars and cigarettes, 5.2. Other products were rubber manufactures, vegetable oils, paper, wool, silk and rayon yarn and cloth, cement, shoes and glass. In 1949, 358,682 tons of pig iron and 345,143 tons of steel were produced.

TRADE. Foreign trade data, in millions of pesos, are as follows:

	1947	1948	1949
Exports	2,151	2,671	3,623
Imports	3,230	2,951	3,527

Chief exports in 1949 were cotton, 13.0 per cent; lead, 12.4 per cent; silver, 6.6 per cent; fresh meat and fish, 6.6 per cent; and coffee, 6.3 per cent. The U. S. took 78 per cent of the exports and supplied 87 per cent of the imports. Other leading customers were China, Britain, Belgium and France. Leading imports included wheat, vehicles, machinery and iron and steel products.

MINERALS. Mexico is one of the richest mineral countries in the world. It outranks all other countries in silver production (1949: 49,453,741 troy oz.). Other

minerals, with 1949 production, are gold, 407,540 troy oz.; lead, 220,764 metric tons; zinc, 178,402 tons; copper, 57,246 tons; and antimony, 5,753 tons. A considerable variety of other industrial minerals is produced. The 1949 mineral value was 1,747,-956,184 pesos; the 1948 petroleum value was 211,145,531 pesos. Deposits of uranium are reported to exist.

Most of the Mexican mining properties are foreign-owned, and the industry is declining in relative importance. The oil fields, lying along the east coast, were seized by the government in 1938, but later the foreign owners were indemnified. There are 13 refineries and plants with daily capacity of 200,000 barrels. Production in 1949 was 60,909,910 barrels. Reserves, however, total only 900,000,000.

FORESTS. Mexico's forests are of considerable importance. Timber produced in 1947 amounted to 398,315,352 bd. ft. of sawed lumber, 85,171,424 bd. ft. of rough-hewn lumber and 95,382,192 bd. ft. of logs (pine, oak, fir, mahogany, red and white cedar and primavera). Resins, turpentine and vegetable wax are also produced. Yucatán produces nearly all of the world's chicle, the juice of the sapodilla tree, used as the base of chewing gum. Chicle production in 1947-48 was 2,400 tons.

COMMUNICATIONS. Mexico has about 15,000 miles of railroad; the 1947 freight total was 21,864,000 tons, of which the nationalized lines carried more than half. There were over 18,000 miles of improved highway in 1949. Merchant ships in 1947 totaled 115,014 gross tons. Veracruz and Tampico, on the Gulf of Mexico, are the most important ports. In 1948, Mexican airlines flew 22,085,925 miles and carried 815,118 passengers.

Recent government financial data are as follows (in millions of pesos):

	1948	1949*	1950*
Revenue	2,002.1	2,382.0	2,597.0
Expenditure	1,955.1	2,551.3	2,746.1

* Budget estimate.

The national debt amounted to 3,050,000,000 pesos on Dec. 31, 1948. The estimated national income in 1948 was \$3,271,-537,623.

TOPOGRAPHY. Mexico is a great, high plateau, open to the north, with mountain chains on east and west and with ocean-front lowlands lying outside of them. It has two big spears—the peninsula of Lower California which is mountainous, and the Yucatán peninsula, which is mostly a low plain. The eastern mountains are marked by high volcanoes, including Popocatepetl, 17,883 feet and not entirely extinct; Ixtaccihuatl, 17,338 feet; and the loftiest, Orizaba, 18,696 feet. None of Mex-

ico's many short streams is navigable to any major extent.

CLIMATE. Partly in the torrid and partly in the north temperate zone, Mexico has three distinct climate regions. From the coasts inland to the plateau it is tropical, with temperatures sometimes topping 100°, but averaging from 77° to 82°. The plateau is sub-tropical with an average of 75°, and the mountains, over 6,000 feet, average 60°. On the east coast the annual rainfall sometimes reaches 100 inches, while in Lower California rain hardly ever falls. Rainfall on the plateau is 20 to 40 inches a year, comparable to that of the west central United States. In Mexico City the coldest months are December and January (about 55°); the warmest, April and May (65°). The wet season is from April to September.

Monaco (Principality)

Area: .59 square mile (375 acres).

Population (est. 1948): 21,000.

Density per square mile: 35,593.2

Ruler: Prince Rainier III.

Principal cities (census 1946): Monaco, 1,854; La Condamine, 9,421; Monte Carlo, 7,967.

Monetary unit: French franc.

Language: French.

Religion: Roman Catholic.

A tiny, hilly wedge driven into the French Mediterranean coast nine miles east of Nice, Monaco is a little land of pleasure with a prewar tourist business that ran to 1,500,000 visitors a year. The home of world-famous Monte Carlo, a place of benign sun and balmy air, Monaco offers golf, tennis and bathing by day, and drinking, dining and gambling by night. Residents of Monaco are forbidden to enter the gaming rooms, but they have compensations. They pay no taxes, and most of them make good livings from the thriving tourist business.

Monaco, with its beautiful terraced hills and crags, had popular gaming tables as early as 1856. Five years later, a 50-year concession to operate the games was granted to François Blanc, of Bad Homburg. This concession passed into the hands of a private company in 1898. Government expenses are paid from the resultant revenue. The concession's annual license fee since 1936 has been £100,000.

The Phoenicians, and after them the Greeks, had a temple on the Monacan headland honoring Heracles. From *Monoi-kos*, the Greek surname for this mythological strong man, the principality took its name. After being independent for 800 years, Monaco was annexed to France in 1793 by the French Revolutionists, and was placed under Sardinia's protection in 1815.

In 1861, it went under French guardianship but kept its independence.

Prince Albert of Monaco gave the principality a constitution in 1911, creating a national council of 21 members popularly elected for four years. The government is under a ministry, acting on the prince's authority. The ruler, Prince Rainier III, born May 31, 1923, succeeded his grandfather, Louis II, on the latter's death, May 9, 1949.

Mongolian People's Republic (Outer Mongolia) (Republic)

Area: 580,158 square miles.

Population (est. 1941): 900,000 (Mongol, except for about 100,000 Russians and 50,000 Chinese).

Density per square mile: 1.55.

Chairman of Presidium: Bumatsende.

Ruler: Marshal Choy Bal-san.

Principal city: Ulan Bator Khoto (Urga), 100,000 (capital).

Monetary unit: Tugherik.

Languages: Mongolian, Russian.

Religion: Lama-Buddhism.

HISTORY AND GOVERNMENT. The Mongolian People's Republic, known also as Outer Mongolia, is a Russian satellite that measures more than twice the area of Texas. It contains the original homeland of the historic Mongols, whose power reached its zenith during the 13th century under Kublai Khan. The area accepted Manchu rule in 1689, but after the Chinese Revolution of 1911 and the fall of the Manchus in 1912, the northern Mongol princes expelled the Chinese officials and declared independence under the Khutukhtu or "Living Buddha." In 1921, Soviet troops entered the country and facilitated the establishment of a republic by Mongolian revolutionaries in 1924 after the death of the last Living Buddha. China, meanwhile, continued to claim Outer Mongolia but was unable to back the claim with any strength. Outer Mongolia significantly signed a military alliance with Russia in 1936 and a treaty of friendship in 1946.

Under the Chinese-Russian Treaty of 1945, China agreed to give up Outer Mongolia, provided that a plebiscite on independence be held first. The subsequent vote was announced as 483,291 to 0, in favor of independence. On Jan. 5, 1946, China recognized Outer Mongolia's independence.

The government of the republic is strikingly similar to the Soviet system. The Great Hural or Huruldan (parliament) is elected by universal suffrage, meets at least once in three years and picks 30 members to act as an executive committee

—the Little Hural—which in turn selects a presidium of seven members as an interim body. A cabinet of ten ministers appointed by the Little Hural governs the country. The only political party is the Mongol People's Revolutionary Party, formed in 1921 around a nucleus of young Soviet-trained Mongols. The army of several thousand is Russian-trained and equipped.

SOCIAL AND ECONOMIC CONDITIONS.

A number of young Mongols are regularly sent to the U.S.S.R. for technical training. The capital, Ulan Bator Khoto, former holy city of the Mongols, has a radio station, several newspapers published in Mongolian, high schools, a university, medical schools, and a military school with Soviet advisers. In 1944, there were 285 primary, 36 secondary, 8 technical and 190 nomad schools in the republic. In 1947 there were 90 hospitals and 234 medical centers.

The country is largely pastoral. There are few areas suitable for crop growing, but some millet, rye and wheat are produced. Most of the people are essentially nomadic or seminomadic; flocks and herds remain the chief source of wealth. In 1941, livestock were said to number 27,500,000, including 15,900,000 sheep.

There are a few industrial enterprises, including a machinery factory, a brick factory and an electric power station all located at Ulan Bator Khoto; power plants, printing shops and automobile repair shops have also been established. All land, natural resources, factories, mines, hay-making stations and public utilities are nationalized.

Foreign trade, a state monopoly, is carried on entirely with the Soviet Union. The only available trade statistics (1936) indicated exports valued at \$5,892,000 and imports valued at \$9,251,000. Leading exports are livestock, wool, hides, animal hair, meat and furs.

Although the old caravan routes are still used, and transportation is mainly by horse, camel or ox carts, a number of motorable roads exists (1938: 2,477 mi.) including a highway from Ulan Bator Khoto to the Siberian border town of Kyakhta. An airline also functions between Ulan Bator Khoto and Ulan Ude in the Buryat Mongol Autonomous S.S.R. which borders Mongolia on the north. A short rail line connects Ulan Bator Khoto with the coal fields, and a spur from the Trans-Siberian runs to the capital.

Reserves of 500,000,000 tons of coal are said to exist in the Nalaikha field near Ulan Bator Khoto. Production in 1938 was 71,650 tons. Some gold is mined. Deposits of antimony, copper, iron ore, lead graphite, mercury, sulfur and silver exist.

TOPOGRAPHY AND CLIMATE. The productive regions of Outer Mongolia—a tableland ranging from 3,000 to 5,000 feet in elevation—are in the north, which is well drained by numerous rivers, including the Kerulen, Tola, Orkhon and Selenga. The climate is continental, with hot summers and cold winters. Mean temperature at Ulan Bator Khoto is 15° in January and 64° in July. Rainfall is light throughout the country, and almost negligible in the Gobi Desert in the southeast.

Morocco (Protectorate)

(Maroc)

Area: 161,691 square miles (French 153,870; Spanish 7,589; Tangier. 232).

Population: French Morocco, 8,617,000 (1947); Spanish Morocco, 1,082,009 (1948); Tangier, 150,000 (1949).

Sultan: Sidi Mohammed ben Youssef.
French Resident General: Alphonse Juin.
Spanish High Commissioner: Juan Varela.

Administrator of Tangier: Jonkheer H. L. F. C. van Vredenburg (Netherlands).

Principal cities (est. 1947): Casablanca, 550,000 (chief seaport); Marrakech, 238,000 (trading center); Fez, 200,000 (commercial center); Rabat, 160,000 (French administrative center).

Monetary units: French franc, Spanish peseta.

Languages: Arabic, French, Spanish.

Religions: Chiefly Mohammedan.

HISTORY. Morocco, about the size of California, is just south of Spain across the Strait of Gibraltar and looks out on the Atlantic from the northwest shoulder of Africa. It was once the home of the Berbers, who helped the Arabs invade Spain in A.D. 711 and then revolted against them and gradually won control of large areas of Spain for a time after 739.

The country was ruled successively by various native dynasties and maintained regular commercial relations with Europe, even during the 17th and 18th centuries when it was the headquarters of the famous Sallî pirates. In the 19th century, clashes with the French and Spanish became frequent. Finally, in 1904, France and Spain divided Morocco into zones of French and Spanish influence, and these were established as formal protectorates in 1912. In the same year a revolt at Fez was followed by the appointment of General (later Marshal) Louis Lyautey as governor general. His administration, lasting until 1925 except for a brief period during World War I, was remarkable for its efficiency and far-sighted policies.

Meanwhile, Morocco had become the object of big-power rivalry, which almost led to a European war in 1905 when Germany attempted to gain a foothold in the rich

mineral country. By terms of the Algeiras Conference (1906), Morocco was internationalized economically and France's privileges were limited. War again seemed imminent in 1911, when Germany dispatched a warship to Agadir in an evident attempt to intimidate France. Again the dispute was settled, however, and this time Germany recognized France's right to establish a protectorate over Morocco.

The Tangier Statute, concluded by Britain, France and Spain in 1923, created an international zone at the port of Tangier, permanently neutralized and demilitarized. In World War II Spain occupied the zone, ostensibly to insure order, but was forced to withdraw in 1945, and the international rule was re-established.

The French zone in Morocco was under the Vichy government of France during part of World War II, but three days after the Allied landing in North Africa in 1942 it came under Allied control.

GOVERNMENT. Morocco nominally is an absolute monarchy under a sultan, but actually the French resident general at Rabat and the Spanish high commissioner at Tetuan direct Moroccan policies to a large extent. The sultan lives in the French zone, and delegates authority to representatives in the Spanish zone and Tangier.

Tangier is governed by an international administration and a council of control composed of the consuls general of the signatories to the Act of Algeiras.

SOCIAL AND ECONOMIC CONDITIONS. Most of the natives are illiterate; some get rudimentary education in Koranic schools or state-maintained institutions. Education is provided in both zones for Europeans.

The natives are Berbers, roughly divided by customs and way of life into three groups—the Riff group along the coast, the central or Berber group in the mid-Atlas Mountains, and the southern or Chleuh in the high Atlas and the Sus. There is a large Jewish population. Most of the Europeans live in the cities.

Morocco is essentially agricultural. In the French zone, about 25,000,000 acres are arable, with 1948 production of wheat coming to 590,000 metric tons; of barley, 1,150,000 tons. Corn, beans, peas, hemp, sorghum, citrus fruits and dates also are raised. Production of olives in 1948 was 76,000 tons. In 1948, 8,474,000 sheep and 1,549,000 cattle were registered.

In the Spanish zone, agriculture is largely undeveloped, but it has potential importance. In 1949, 50,280 metric tons of barley were produced; wheat, maize and sorghum crops are also important.

Manufacturing industries introduced by

Europeans, mostly small, produce chemicals, flour, leather, stone, beverages and textiles. Native industries include carpet weaving and making Turkish slippers.

Exports from the French zone in 1949 totaled 53,515,600,000 fr.; imports, 103,321,000,000 fr. Chief exports are phosphate, fish, citrus fruit and vegetables. Imports include cotton cloth, sugar, vehicles and tea. Exports from the Spanish zone in 1948 totaled 206,442,000 pesetas and imports 572,422,000 pesetas. A large proportion of the trade is carried on with Spain. Major exports are iron ore, fish and grain; imports include flour, sugar, tea, wine and textiles. Tangier's exports in 1949 were 2,255,955,000 fr.; imports were 9,838,378,000 fr.

Railroads in 1948 totaled 1,990 miles in the French zone and 75 miles (standard gauge) in the Spanish zone. Highway mileage in the same year was approximately 5,700 in the French zone, about 500 in the Spanish zone and 65 in Tangier. Casablanca, which handles 80 per cent of the French zone trade, has perhaps the world's largest artificial port.

The importance of Tangier, once Morocco's first port, has declined under the international regime, and its harbor works are obsolete.

The ordinary budget for the French zone in 1949 balanced at 25,574,000,000 fr.; extraordinary expenditure was estimated at 15,753,000,000 fr. The budget for the Spanish zone in 1950 balanced at 280,399,318 pesetas. The 1950 ordinary budget of the international administration at Tangier provided for receipts of 999,681,000 fr. and expenditures of 968,666,000 fr.; the extraordinary budget balanced at 1,653,800,000 fr. Custom receipts provide most of the revenue.

Exploitation of French Morocco's almost inexhaustible deposits of phosphate is a state monopoly and produced a total of 3,626,000 metric tons in 1949. Other major minerals are coal, cobalt, iron ore, manganese ore, molybdenum, tin, zinc and lead. Iron ore (1949: 955,317 metric tons) is the chief mineral of the Spanish zone; others are antimony and manganese.

Cork, gums and tannins are the principal forest products in the French zone, mostly from the northern Atlas slopes; in the Spanish zone, cork, wax and charcoal are leading products. Waters off both coasts provide rich fisheries.

TOPOGRAPHY AND CLIMATE. On the Atlantic coast, there is a fertile plain; the Mediterranean coast is mountainous, making most of the Spanish zone a rugged area. The Atlas Mountains, running north-eastward from the south to the Algerian frontier, average 11,000 feet in elevation.

Morocco's climate is essentially Mediterranean, modified by the Atlantic. On the Atlantic coast the temperatures are relatively cool (at Mogador, 61.5° in January and 72.3° in August). Inland the climate is more continental, with colder winters and hotter summers (at Fez, 50° in January and 80.6° in August). The rainy season is in October–November and April–May. Snow falls at altitudes above 3,000 feet.

Nepal (Military Oligarchy)

Area: c.54,000 square miles.

Population (est. 1948): 7,000,000 (Gurkha [predominant], Magar, Gurung, Bhotia [Tibetan], Newar).

Density per square mile: c.129.6.

Ruler: Tribhubana Bir Bikram.

Prime Minister: Sir Mohan Shumshere Jung Bahadur Rana.

Principal city and capital: Katmandu (estimated population, 108,800).

Monetary unit: Nepalese rupee.

Languages: Parbatia, Gubhajius, Tibetan.

Religions: Hinduism, Buddhism.

HISTORY. A landlocked country about the size of Iowa, lying between the Republic of India and Tibet, Nepal has two great distinctions. It contains Mt. Everest, 29,002 feet high, the tallest measured mountain in the world. And it produces some of the toughest fighting men in the world—the Gurkhas.

Led by Rajah Prithwi Narayana, the Gurkhas invaded Nepal from India in 1768 and conquered it. A commercial treaty was signed with Britain in 1792, and in 1816, after more than a year's hostilities, the Nepalese agreed to allow British residents to live in Katmandu, the capital. In 1923 Britain recognized the absolute independence of Nepal. The United States and Nepal signed a treaty of friendship and trade on April 25, 1947. Plans for extensive social and political reforms were announced in the same year, but the prime minister resigned soon thereafter.

Nepalese troops assisted the British during the Indian Mutiny, the Tibet War of 1904, World War I, the Afghan hostilities of 1919, and World War II.

GOVERNMENT. Theoretically, the king is supreme, but real power is invested in the prime minister, nominated by special rules from among the royal family, whose members are Hindu Rajputs. Under the prime minister is a council consisting of members of the ruling family, the military, the high priests and other high officials. The predominant Gurkhas are essentially a military caste. The army numbers about 20,000 regulars and 25,000 reserves. More than 100,000 Gurkha volunteers fought

with the Indian Army in the Burma campaign of World War II.

ECONOMIC CONDITIONS. Cultivated and irrigated where possible, the main valley of Nepal grows rice, wheat, pulse, fruits, vegetables, spices, sugar cane and potatoes. A few sheep and cattle are grazed. Manufacturing is limited to native handicraft, but jute and textile mills are being established. Trade with India and Pakistan passes through various frontier stations, and there are two mountain trade routes to Tibet.

Main exports include hides, skins, opium, gums, resins, dyes, jute, wheat, pulse, rice, spices and timber. Two railroads enter Nepal for short distances—one from Raxaul, India, to Amlekhganj, the other from Jayauagar to Bijulpura. Transportation is for the most part difficult.

TOPOGRAPHY, RESOURCES AND CLIMATE. Along its southern border, Nepal has a strip of level land which is partly forested, partly cultivated. North of that is the slope of the Himalayan Range, including Mt. Everest and many peaks higher than 20,000 feet. Mineral resources, nearly all unexploited, include lignite, copper, zinc, lead, sulfur, marble and iron. Southern Nepal has valuable forests which yield gum, timber, resin and dye. Hemp plants grow wild. Mean temperature is 60°, with the hot season from April to June. Most of the rainfall (average 60 in. annually) occurs from June to October.

Netherlands (Kingdom)

(Koninkrijk der Nederlanden)

Area: 12,504 square miles.*

Population (est. Jan. 1, 1950): 10,026,748 (practically all Dutch).

Density per square mile: 801.9.

Sovereign: Queen Juliana.

Prime Minister: Willem Drees.

Principal cities (est. 1950): Amsterdam, 835,834 (capital, financial center); Rotterdam, 675,905 (chief port); The Hague ('s Gravenhage), 558,849 (seat of government); Utrecht, 193,190 (railway center); Haarlem, 161,980 (tulip center).

Monetary unit: Guilder.

Language: Dutch.

Religions (census 1947): Roman Catholic, 38.5%; Dutch Reformed, 31.0%; other Protestant, 13.3%; Jewish, 0.2%; others and no creed, 17.0%.

* Land area only.

HISTORY. The Netherlands is small, half again as large as Massachusetts, but it is densely settled, is a major colonial power, and was eighth from the top in world trade at the start of World War II. Occupied by the Nazis until May, 1945, the Netherlands emerged with a fairly well salvaged economy and a less than average

degree of the political chaos that gripped Europe.

Julius Caesar, the Roman, found the low-lying Netherlands inhabited by Germanic tribes, the Nervii, Frisii and Batavi. The Batavi on the Roman frontier did not submit to Rome's rule until 13 B.C., and then only as allies. A part of Charlemagne's empire in the 8th century A.D., the area later passed into the hands of Burgundy and the Austrian Hapsburgs and finally in the 16th century came under Spanish rule. When Philip II of Spain suppressed political liberties and the growing Protestant movement in the Netherlands, a revolt led by William of Orange broke out in 1568. Under the Union of Utrecht in 1579, the seven northern provinces became the Republic of the United Netherlands.

The Dutch East India Company had been established in 1602, and by the end of the 17th century Holland was one of the great sea and colonial powers of Europe. In 1689 William III of Orange and his wife, Mary, the elder daughter of James II of England, became King and Queen of England. The power of the republic declined in the 18th century during the wars with Spain and France, and in 1795 French troops ousted William V.

Following Napoleon's defeat, the United Netherlands and Belgium became the "Kingdom of the United Netherlands" under William I, son of William V and head of the House of Orange. The Belgians withdrew from the union in 1830, forming their own kingdom. William I abdicated in favor of William II in 1840; the latter was largely responsible for the promulgation of a liberal constitution in 1848.

The Netherlands continued to prosper during the long reign of William III from 1849 to 1890. The male line of the House of Nassau became extinct with his death in 1890 and he was succeeded by his 10-year-old daughter, Wilhelmina, who was crowned Queen in 1898.

Neutrality was maintained during World War I, but overseas trade suffered heavily from the Allied blockade and German submarine warfare.

The prime minister from 1933 to 1939, except for brief intermissions, was Dr. Hendrick Colijn, leader of the Protestant Anti-Revolutionary Party. At the outbreak of World War II neutrality was proclaimed, but German troops invaded the country May 10, 1940, and by May 15, Dutch forces were ordered to lay down their arms. Queen Wilhelmina and Crown Princess Juliana fled to London, where a government-in-exile was established under Prime Minister P. S. Gerbrandy.

The German Army in the Netherlands capitulated May 5, 1945, and on May 23,

the Dutch cabinet met once more in The Hague and tendered its resignation to Queen Wilhelmina. A new cabinet was formed on June 23 under Professor Willem Schermerhorn, a resistance leader and head of the Labor party. The Catholic party obtained a plurality in the May, 1946 elections and its leader, Dr. Louis J. M. Beel, set up a Labor-Catholic cabinet on July 3.

In parliamentary elections held July 7, 1948 (made necessary by consideration of constitutional questions dealing with Indonesia), the Catholic party retained its plurality, but Dr. Beel was unable to form a new cabinet and on Aug. 2 Labor leader Willem Drees formed a new coalition government.

Queen Wilhelmina abdicated after her fiftieth anniversary as ruler on Sept. 6, 1948, and was succeeded by Juliana, of Orange and Nassau, her only child, who took her oath as Queen of the Netherlands in a brilliant ceremony in the Nieuwe Kerk (500-year-old church) in Amsterdam.

GOVERNMENT. Queen Juliana, born April 30, 1909, was married on Jan. 7, 1937 to Prince Bernhard of Lippe-Biesterfeld (born in 1911). They have four daughters: Beatrix, the heiress apparent, (born 1938); Irene (born 1939); Margriet Francisca (born 1943), and Maria Christina (born 1947).

The Netherlands is a constitutional and hereditary monarchy, with female succession taking place only in default of male heirs. Executive power is vested exclusively in the sovereign, while legislative power rests with the sovereign and the States-General (Parliament). The upper chamber of Parliament, with 50 members, is elected for 6 years by the provincial states. The lower chamber, which shares with the government the privilege of initiating new bills and proposing amendments, consists of 100 deputies who are elected directly for four years and retire *en bloc*. Executive power is exercised in part by responsible ministers, headed by the prime minister and holding office at the pleasure of the sovereign. Suffrage is universal for all Dutch subjects of 23 years of age. The party standing in the lower chamber (elections of July, 1948) is as follows: Catholic 32, Labor 27, Anti-Revolutionary 13, Communist 8, Christian Historical Union 9, others 11.

Each of the eleven provinces has a local representative body—a Provincial State—presided over by a royal commissioner. The State collects taxes, and legislates on local matters. Routine administrative work of the province is carried on by a group of six members called the Deputed States. Each of the 1,054 communes has a locally elected council and a mayor appointed by the crown.

DEFENSE. Military service is compulsory. The army had about 175,000 men in 1949, and the air force 300 planes. The navy on Jan. 1, 1950, had one fleet carrier, two light cruisers (two more under construction), seven destroyers, eight submarines and other smaller craft. Personnel numbered 27,700. Bases are maintained in Indonesia and the Caribbean, as well as in the homeland.

EDUCATION. Education is compulsory from the ages of 7 to 13; illiteracy is almost unknown. In 1947-48, elementary schools numbering 7,936 (of which over 5,000 were private) had a total enrollment of 1,293,269; 318 secondary schools had 86,490 pupils. The six universities and four *hogescholen* (vocational colleges) had 25,036 students. The four public universities are at Leyden, Utrecht, Groningen and Amsterdam; the two voluntary universities are the Calvinist University of Amsterdam and the Roman Catholic University of Nijmegen.

RELIGION. The royal family and a large number of the inhabitants belong to the Dutch Reformed Church (Protestant), but there is complete religious freedom. Appropriations from the national budget are made for support of the Protestant, Roman Catholic, Jewish and Jansenist Churches. The Roman Catholic element is strongest in the southern provinces of Limburg and North Brabant.

AGRICULTURE. Of the total area in May, 1948, 2,684,204 acres were arable, 3,020,295 were permanent meadowland and 227,826 were devoted to horticulture, arboriculture and fruit gardens. Dutch farms are characteristically small, with only a few larger than 250 acres. Wheat (425,000 metric tons in 1949), barley (189,000 tons), rye (517,000 tons), oats (424,000 tons), potatoes (4,299,000 tons) and sugar beets (2,590,000 tons) are grown, but dairying is more important. In 1949 there were 2,540,000 cattle, 1,298,000 hogs, 464,000 sheep and 304,000 horses. Production of milk, butter and eggs is under state control. Large quantities of vegetables and fruits are raised for export. Almost as important as the dairy industry is the raising of tulip, hyacinth and other flower bulbs in the area around Haarlem.

INDUSTRY. The Netherlands is a highly industrialized nation, utilizing both overseas raw materials and domestic agricultural products. In 1948 there were 9,230 larger establishments with 773,527 workers. Leading industries are textiles, clothing, shipbuilding, shoes, food, and building materials.

The Netherlands ranked fourth among the world's shipbuilding nations in 1949: 109 vessels of 314,752 gross tons were under construction on March 31, 1950. Amsterdam is one of the world's leading diamond-

cutting centers. Industrial production in April, 1950, was 131 per cent of the 1937 level.

TRADE. The adverse balance of trade has increased markedly since the end of World War II. Trade statistics, in millions of guilders (excluding parcel post, specie and diamonds) are as follows:

	1947	1948	1949
Exports	1,859.3	2,669.5	3,794.
Imports	4,252.5	4,919.1	5,296.6

Principal customers in 1949 were Britain, 16.2 per cent; Belgium, 13.3 per cent; Germany, 10.7 per cent; Indonesia, 10.3 per cent; and France, 7.1 per cent. Leading suppliers were the U. S., 16.5 per cent; Belgium, 14.3 per cent; Britain, 10.9 per cent; Indonesia, 7.6 per cent; and France, 6.8 per cent. The chief exports were dairy products and eggs, 16.4 per cent; fabrics and clothing, 8.7 per cent; machinery, 8.6 per cent; vegetables and fruits, 6.0 per cent; and meat and fish, 4.7 per cent. Leading imports were machinery, iron and steel and manufactures, cereals and flour, transportation equipment and timber.

Dislocation of foreign commerce caused by the loss of trade from the once highly industrialized German hinterland and from Indonesia continues to be the most difficult economic problem.

COMMUNICATIONS. The Dutch merchant marine had 1,113 seagoing vessels of 2,946,179 gross tons on Jan. 1, 1950—the fifth or sixth largest in the world. An extensive network of rivers expanded by many canals has led to extensive development of inland shipping. The length of navigable canals and rivers is almost 5,000 miles. River ships and barges numbered 17,000 on Jan. 1, 1950, with an aggregate dead-weight tonnage of 4,000,000. In 1949, 52,300,000 tons of freight were carried on rivers and canals. The wealth of water transport has obviated the need for wide railway development. In 1948 there were 2,083 miles of railway, all operated by a government-owned company, and, in 1949, 9,320 miles of highway open to traffic.

Air service is provided by Royal Dutch Airlines (KLM), which flew 26,579,000 miles on 78 routes in 1949 and carried 666,000 passengers.

FINANCE. Ordinary expenditures for 1950 were estimated at 3,978,000,000 guilders, extraordinary expenditures at 571,000,000 guilders, and all revenue at 3,983,000,000 guilders. Principal sources of revenue are the income, turnover and wage and salary taxes. The public debt on Dec. 31, 1949, was 21,815,841,000 guilders.

MINERALS, FORESTS AND FISHERIES. Netherlands minerals are few. The only important ones are coal (11,705,000 metric tons in 1949), lignite and salt. There also

are peat swamps and about 630,000 acres of forest. The Netherlands fishing fleet made a catch of 243,694 metric tons valued at 72,859,000 guilders in 1949. Herring (103,047 tons valued at 31,671,000 guilders) was the most important item.

TOPOGRAPHY. Part of the great plain of north and west Europe, the Netherlands has maximum dimensions of 190 by 160 miles and is low and flat except in Limburg in the southeast, where some hills rise to 300 feet. About half the country's area is below sea level, making the famous Dutch dikes a requisite to use of much land. Reclamation of land from the sea through dike-building has continued through recent times, and such land is usually very fertile.

The province of Zeeland consists mainly of six delta islands guarding the mouth of the Schelde (Scheldt) River and the entrance to Belgium's port of Antwerp. Off the northwest coast are the sandy West Frisian Islands, lying from three to twenty miles out and stretching from the Zuider Zee to the German coast.

All drainage reaches the North Sea, and the principal rivers—Rhine, Maas (Meuse) and Schelde—have their sources outside the country. The Rhine is the most heavily used waterway in Europe, and nearly three-fourths of its 75 to 85 million tons of annual prewar traffic was handled through the port of Rotterdam.

CLIMATE. Marsh mists, sea fogs and a humidity exceeding 80 per cent mark the Netherlands climate. Winters are colder than in eastern England at the same latitude. Utrecht, roughly central in location, has a January average temperature of 34.2° and a July average of 62.6°. Average rainfall for the country is about 28 inches, with July–September the wettest period.

NETHERLANDS OVERSEAS TERRITORIES

NETHERLANDS ANTILLES—Status: Part of the United Kingdom of the Netherlands.

Area: 403 square miles.
Population (est. 1949): 160,000.
Capital: Willemstad (pop. 1949: 45,000).
Governor: L. A. H. Peters.
Foreign trade (1948): exports, 766,000,-000 florins; imports, 867,000,000 florins. Chief export: petroleum products (more than 95 per cent).

Agricultural products: aloes, beans, corn. Manufactures: refined petroleum, straw hats.

Mineral products: lime phosphate, salt.

This comprises two groups of Caribbean islands 500 miles apart; one, about 40 miles off the Venezuelan coast, consists of Curaçao (210 sq. mi.), Bonaire (95 sq. mi.) and Aruba (89 sq. mi.); the other, lying to the northeast, consists of 3 small islands with a total area of 29 square

miles. The Dutch acquired the island of Curaçao from Spain in 1634 and have held it since, except for short intervals during the Napoleonic Wars. The U. S. accepted the invitation of the Netherlands government during World War II to dispatch troops to Curaçao to co-operate in its defense. Administrative officials include the governor (appointed by the crown) and an elected legislature and cabinet.

The backbone of Curaçao's economy is the refining of crude oil which comes from the adjacent Maracaibo fields in Venezuela. The refinery on Aruba, the world's largest, completed in 1945 the processing of the billionth barrel of oil since its opening in 1929. Aside from native Curaçaoans, there were in the territory 7,511 English, 5,156 Dutch and 4,213 Venezuelans in 1943. Dutch is the official language, but many inhabitants speak a patois known as Papiamentu, a mixture of Spanish, Dutch, English, Portuguese, native and other words. Only a small part of the trade is carried on with the homeland.

The island of Curaçao has a torrid climate, with average temperatures of 79° in January and 83° in September. Rainfall is light, averaging only 16 inches annually—mostly from October to January.

SURINAM (Dutch Guiana)—Status: Part of the United Kingdom of the Netherlands.

Area: 54,291 square miles.
Population (est. 1948): 186,170.*
Capital: Paramaribo (pop. 1947: 75,233).
Governor: J. Klaasesz.
Foreign trade (1949): exports, 34,077,650 Surinam guilders; imports, 37,812,004 guilders. Chief exports: bauxite (74%).
Agricultural products: rice (1949: 30,-000 metric tons), sugar, coffee.
Minerals: bauxite (1949: 2,161,585 metric tons), gold (118,000 grams).
Forest products: balata (1949: 54 metric tons), timber.

* Excluding aborigines, numbering about 25,000.

Surinam lies in northeastern South America between British and French Guiana. It was received by the Dutch from England at the Peace of Breda (1667) in exchange for New York and at that time included British Guiana, which was seized by England in 1803 and formally ceded to her at the conclusion of the Napoleonic Wars. The United States and Brazil accepted the invitation of the Netherlands government during World War II to co-operate in the defense of the valuable bauxite mines. The governor (appointed by the crown) is assisted by an all-native legislature and cabinet.

Mining is the most important activity, and only about 65,000 acres are devoted to agriculture. The largest bauxite mines are owned by Aluminum Company of America subsidiaries. In 1946 a company was formed to work 10,000,000 acres of the

area's vast, but almost inaccessible, hardwood forests.

In 1948 the heterogeneous population included 2,100 Europeans, 2,560 Chinese, 22,000 Djukas (descendants of escaped slaves), 3,700 aboriginal Indians, 81,750 Negroes and mulattoes, as well as 97,000 Indian and East Indian laborers brought in after the abolition of slavery in 1863 to work the sugar plantations.

From its settled coastal plain, Surinam runs back to a virtually unexplored mountain and jungle area along the Brazilian border. Rivers are the chief means of interior travel. The climate is tropical throughout but is modified by the northeast trade winds. Yearly range of temperature is approximately 70.5°-90°. Annual rainfall is about 90 inches on the coast.

Indonesia

Area: 583,479 square miles.*

Population (est. 1949): 79,260,000* (Native except for 1,190,014 Chinese, 240,162 European [208,269 Dutch], and 7,195 Japanese in 1930).

Density per square mile: 135.8.

Sovereign: Queen Juliana.

High Commissioner: H. M. Hirschfeld.

President: Achmed Sukarno.

Premier: Mohammed Natsir.

Principal cities (census 1930): Jakarta (Batavia), 435,184 (est. 1949: 1,200,000) (capital); Surabaya, 341,675 (seaport, naval base); Semarang, 217,796 seaport, central Java); Bandung, 166,815 (commercial center, west Java); Surakarta, 165,484 (sugar, tobacco).

Monetary unit: Indonesian guilder.

Languages: Javanese, Sundanese, Madurese, Malay, Dutch.

Religions: Mohammedan (predominant), Christian (about 2,500,000), Brahmin, Buddhist.

* Excluding Netherlands New Guinea.

HISTORY. The United States of Indonesia, a group of islands with a total area more than twice that of Texas, constitutes one of the world's richest natural areas. These islands—Sumatra, Java, Madura, central and southern Borneo, Celebes and the Moluccas—would reach from San Francisco to Honolulu if their extent was transposed to the eastern Pacific. They have great wealth in tin, rubber, spices, oil, quinine and copra. Postwar economic recovery, however, was retarded in Java and Sumatra by conflict between the Dutch and native nationalists, and between the latter and Communists.

During the first few centuries of the Christian era, most of the islands came under the influence of Hindu priests and traders who spread their culture and religion. Moslem invasions began in the 13th century, and most of the area was Moslem by the 15th century. Portuguese traders

arrived early in the 16th century but were ousted by the Dutch about 1595. After Napoleon subjugated the Netherlands homeland in 1811, the British seized the islands but returned them to the Dutch in 1816. Political and economic reforms were introduced about 1870, and in 1903 the natives won a part in local affairs. In 1922 the islands were made an integral part of the Netherlands kingdom.

In World War II, Japanese troops began their attacks in early 1942; they took Batavia on March 5 and the big naval base at Surabaya by March 10. Japanese military occupation with nominal native self-government continued until Aug., 1945, except in outlying parts of New Guinea and Borneo. About the time of the Japanese surrender, a self-styled Indonesian Republic headed by Achmed Sukarno sprang up and took over effective control of parts of Sumatra and Java. Allied forces, mostly British Indian troops, moved in, and fighting between them and the nationalists continued until Nov. 15, 1946, when Dutch-native negotiations resulted in a draft agreement initialed at Linggadjati, near Cheribon. The agreement was formally signed by Dutch and Indonesian authorities on March 25, 1947.

Under this agreement there was to be formed by Jan. 1, 1949, the Netherlands-Indonesian Union, consisting on the one hand of the Netherlands, Curaçao and Surinam, and on the other of the United States of Indonesia. The latter was to be a sovereign state composed of three equal states: the Republic of Indonesia (Java, Sumatra, Madura), East Indonesia (Celebes, the Moluccas, Bali, Lombok, Dutch Timor), and Borneo.

Plans for implementing the agreement, however, remained in controversy, and fighting between the Dutch and the nationalists broke out anew on July 20, 1947. Dutch forces made large gains in both Sumatra and Java and regained control of Madura. Both sides issued cease-fire orders on Aug. 4, 1947, in response to a call from the U. N. Security Council, which named a Good Offices Commission under whose auspices the Dutch and the Republic signed another truce on Jan. 17, 1948, aboard the U.S.S. *Renville*. A provisional federal government for the whole area was installed on Mar. 9, 1948, but difficulties between the Dutch and the Republic continued. On Dec. 13, 1948, Dutch forces instituted "police" action against Republican areas and seized the Republican leaders. Hostilities ceased Jan. 1, 1949, following U. N. intervention. On May 7, the Dutch agreed to return the exiled Republican regime to central Java.

Negotiations for establishment of the federation culminated in inter-Indonesian agreement on the terms of union on Aug. 2,

1949, and on a provisional constitution on Oct. 30. On Nov. 2, Dutch and Indonesian leaders agreed upon the terms of union between the Netherlands and Indonesia. Dr. Sukarno was elected president of the federation on Dec. 16 by representatives of the Indonesian states, and the first all-Indonesian cabinet was formed with Mohammed Hatta as premier. The transfer of sovereignty took place at Amsterdam on Dec. 27, 1949.

GOVERNMENT. Under the statute of union between the Netherlands and Indonesia, both are sovereign independent nations joined together in the person of the Queen of the Netherlands. The statute provides for economic, financial and military co-operation. The provisional constitution originally contemplated a federal form of government headed by the president, to whom ministers were responsible. The provisional parliament was to have a lower house and a senate, the former composed of 150 members selected or nominated in various ways. Within one year after the transfer of power, a people's assembly was to be elected in free elections, and as soon as possible thereafter a special constituent assembly was to be formed to draft the final constitution.

At the date of the transfer of power, Indonesia consisted of 7 *negaras* (autonomous states), including the Republic of Indonesia, and 9 *daerahs* (independent constitutional units). In the first few months of 1950, most of these areas were amalgamated, in many cases forcefully, into the Republic of Indonesia, with the result that, on May 19, 1950, an agreement was signed between the federal government (acting also on behalf of the 2 remaining *negaras* of east Indonesia and east Sumatra) and the Republic of Indonesia, providing that Indonesia should be a unitary rather than a federal state. On Aug. 15, 1950, Indonesia was formally proclaimed a unitary state consisting of 10 provinces.

The Netherlands retained sovereignty over Dutch New Guinea (area, 151,789 sq. mi.; population, about 400,000), with the proviso that a further decision with respect to its status should be negotiated within one year after the transfer of power.

Dutch forces were evacuated from Indonesia in the first part of 1950, and Indonesian members of the Royal Netherlands Indies army were incorporated into the federal army.

SOCIAL AND ECONOMIC CONDITIONS. There are some 20,000 native schools (including New Guinea) with 2,500,000 pupils, and 628 European-type schools with 150,000 students, but the illiteracy rate is high. There are institutions of higher learning at Jakarta and Bandung, and numerous schools are maintained by Christian missionaries.

The islands of Java and Madura, with only nine per cent of the area, have more than two-thirds of the population, and are among the most densely settled areas in the world (more than 800 per sq. mi.). The natives, including about 137 races and tribes, are mainly of Malayan stock, with the Javanese the most advanced.

Agriculture engages about 70 per cent of the adult males. Rich in a variety of crops, the islands prior to World War II produced about 31 per cent of the world's copra, 37 per cent of its rubber, 83 per cent of its pepper, and nearly all of its quinine. The big-estate agriculture on Java and Sumatra is devoted mainly to export. The rest is subsistence agriculture. Rice is the staple food and chief crop; production in Java and Madura was about 6,199,000 metric tons in 1949; that of the rest of the archipelago, 3,788,000 tons.

Recovery of plantation agriculture, especially sugar, tea and pepper, was hampered by the "scorched earth" tactics of the nationalists. However, rehabilitation made good progress in Dutch-held areas. Major plantation crops, with 1949 production in metric tons, are: rubber, 170,641; tea, 27,219; palm oil, 118,624; coffee, 10,633; palm kernels, 29,370; cinchona bark, 8,499. Others are sugar, cacao, spices, agave fiber, copra and kapok. In addition to rice, the chief food crops are maize, cassava, sweet potatoes, peanuts and soybeans.

Livestock, important to the natives, included in 1940 a total of 3,175,000 carabaos, 4,600,000 cattle and 710,000 horses.

Industry, especially in Java, developed rapidly after 1930. In addition to industries connected with the processing of the rich natural products, there were established chemical works, textile and paper mills, soap factories, breweries, shipyards, a Goodyear tire and rubber plant and a General Motors assembly plant. In 1940 there were 5,469 manufacturing plants with 288,941 workers and gross annual production of \$211,000,000. Cottage industries, mainly on Java, also were important. War damage was severe.

Indonesia is primarily an importer of consumer and capital goods and an exporter of mineral and plantation products. Exports in 1949 (Dutch-held areas) amounted to 1,444,000,000 guilders; imports were 1,574,000,000 guilders. Chief exports were petroleum products (28%), rubber (24%) and tin (11%). Chief customers were Malaya and Singapore (25%), the Netherlands (24%) and the U. S. (16%); chief suppliers, the U. S. (28%), the Netherlands (24%) and Britain (11%).

In 1940 there were 43,450 miles of road, mostly in Java and Sumatra; and 4,620 miles of railway, of which 3,387 were in Java and 1,233 in Sumatra.

The 1947 budget for Dutch-held Indonesia estimated expenditure at 2,929,000,000 guilders and revenue at 1,034,000,000.

Oil is the principal mineral product of the Netherlands Indies. The fields, in Sumatra, east Borneo and east Java, produced 62,100,000 barrels in 1939, which was 3 per cent of the world total. In 1949 production was about 43,205,969 barrels, and almost all the refineries were operating at prewar capacity.

The islands' output of 30,100 tons of tin in 1939 amounted to 16 per cent of the world supply. The industry recovered more rapidly than others after World War II, and produced 28,965 long tons of tin ore in 1949. Other important minerals include bauxite (1949: 678,138 metric tons), coal, salt, nickel and manganese. Deposits of uranium are believed to exist.

Forests, covering much of the area except Java, yield such products as timber, rattan, bamboo, gum, wild rubber, gutta-percha and quinine. Most valuable timber is teak, found mostly in east Java. Ebony, sandalwood and ironwood also are cut.

TOPOGRAPHY AND CLIMATE. A backbone of high mountain ranges with many snow-capped peaks extends throughout the main islands of the archipelago. Earthquakes are frequent, and there are many active volcanoes, 90 of them in Sumatra. Borneo is heavily forested, with interiors that are difficult to penetrate.

The climate throughout the group is equatorial and monsoonal, with little variation of temperature (yearly average about 80°; at Batavia, 79°) and rainfall averaging over 100 inches a year. In Sumatra and Java the hot and rainy season usually lasts from May to October; December and January are relatively cool and dry; February, March and April, hot and dry.

Nicaragua (Republic)

(República de Nicaragua)

Area: 57,143 square miles.*

Population (est. 1949): 1,184,000 (1943: mestizo, 69%; white, 17%; Negro, 9%; Indian, 5%).

Density per square mile (land only): 20.7.

President: Anastasio Somoza.

Principal cities (est. 1948): Managua, 146,819 (capital); León, 53,277 (trading, railroad center); Matagalpa, 53,118 (coffee center); Jinotega, 41,065.

Monetary unit: Córdoba.

Language: Spanish.

Religion: Roman Catholic.

* Including inland water area of 3,475 square miles.

HISTORY. Nicaragua was first visited by the Spaniards in 1522. The chief of the country's leading Indian tribe at that time

was called Nicaragua, from whom the nation derived its name. The country was part of Spanish Guatemala until the general Central American revolution in 1821. Upon the dissolution of the Central American Union in 1838, Nicaragua established itself independently. A United States naval force intervened in 1909 after two American citizens had been executed, and a few U. S. Marines were kept in the country from 1912 to 1925. The Bryan-Chamorro Treaty of 1916 gave the United States an option on a canal route through Nicaragua, and naval bases in the Gulf of Fonseca on the Pacific coast and on Corn Islands on the Atlantic side. Disorder after the 1924 elections brought in U. S. Marines again, but they were withdrawn gradually after the U. S.-supervised elections of 1928, although sporadic fighting continued between government troops and rebel forces under General Augusto Sandino. Juan B. Sacasa was elected president in the U. S.-supervised elections of 1932, but he was forced to resign in 1936. General Anastasio Somoza, elected president in Dec., 1936, restored political and economic stability. Re-elected in 1939, he remains the virtual dictator. Dr. Leonardo Argüello was elected president in Feb., 1947 but was ousted after taking office because of his opposition to Somoza. The newly elected constituent assembly named Victor M. Román y Reyes president on Aug. 15, 1947. Gen. Somoza took office again on May 21, 1950, after national elections.

GOVERNMENT AND DEFENSE. The constitution of 1948 provides for a president, popularly elected for six years, and a two-house Congress—a 44-member Chamber of Deputies and a 15-member Senate—both elected for six years. There are sixteen regional departments. Military service is voluntary. The Guardia Nacional, both an army and police force, numbers about 3,500. A naval base built at the Pacific port of Corinto by the U. S. during World War II was turned over to Nicaragua in 1946.

SOCIAL AND ECONOMIC CONDITIONS. Although primary education is free and compulsory, about 60 per cent of the people are illiterate. There are three universities and several vocational schools. In 1949 there were 1,382 schools of all kinds with 101,502 students. Western Nicaragua, with about 75 per cent of the population, is inhabited principally by mestizos of Spanish and Indian blood, with some whites and Indians. Negroes and Indians are dominant in eastern Nicaragua.

More than half of Nicaragua is jungle-covered; agriculture, the leading industry, utilizes only 10 per cent of the total land. Coffee (1948: 245,000 bags) is the chief crop and grows in the western part, which also produces sugar cane, cacao, sesame,

beans, rice, tobacco and corn, the chief subsistence crop. Bananas lead in the eastern part, with cotton second. About 900,000 acres are devoted to livestock grazing. Except for some sugar refining, only locally consumed products are manufactured.

Exports in 1948 were valued at \$26,682,607; imports, at \$24,133,703. The U. S. supplied 85 per cent of the imports and took 44 per cent of the exports. Leading exports were gold, coffee, bananas, sesame and lumber.

Gold (1948: 218,019 troy oz.) has surpassed coffee as the most lucrative export. Silver production in 1948 was 214,628 troy oz. One-third wooded, Nicaragua produces mahogany, rosewood, cedar, rubber and ipecac root. In 1947 Nicaragua exported 28,504,157 bd. ft. of logs and lumber, including 4,382,519 bd. ft. of mahogany.

Good highways, long lacking, are now being constructed; there were 418 miles of paved road in 1949. Railways, mostly nationalized and limited to the west, were only 236 miles in 1949. TACA (Central American Airlines) and Pan American both supply air service. Corinto and San Juan del Sur, on the Pacific, are the chief ports.

The budget report for 1948-49 recommended expenditures of 76,745,655 córdobas. The public debt on Dec. 31, 1948, was 53,600,000 córdobas.

TOPOGRAPHY AND CLIMATE. Largest but most sparsely populated of the Central American nations, Nicaragua is mountainous in the west, with fertile valleys. A plateau slopes eastward toward the Caribbean. Two big lakes—Nicaragua, about 100 miles long, and Managua, about 38 miles long—are connected by the Tipitapa River. The Pacific coast is bald and rocky; the Caribbean coast, swampy and indented, is aptly called the "Mosquito Coast." The highlands have cool temperatures, while the coasts are hot and sultry. The east coast receives up to 100 inches of rain a year. The wet season is generally from May or June through November or December.

Norway (Kingdom)

(Norge)

Area: 125,193 square miles.

Population (est. Dec. 31, 1949): 3,249,000 (Norwegian, 98.7%; Swedish, .8%; others, .5%).

Density per square mile: 25.9.

Sovereign: King Haakon VII.

Prime Minister: Einar Gerhardsen.

Principal cities (est. 1948): Oslo, 427,500 (capital, chief port); Bergen, 113,683 (seaport, shipbuilding); (1946) Trondheim,

57,128 (seaport, timber, fish); Stavanger, 50,320 (seaport, fisheries).

Monetary unit: Krone.

Language: Norwegian.

Religions: Evangelical Lutheran (state), 96.8%; others, 3.2%.

HISTORY. Emerging in 1945 from the harsh German occupation of World War II, Norway faced the problem of rebuilding a shattered economy and of replacing the 50 per cent losses suffered by its merchant shipping fleet, once the fourth greatest in the world.

The country, about the size of New Mexico and the most thinly-populated nation of continental Europe, is one of the world leaders in fishing. Despite Soviet pressure, Norway adhered to the North Atlantic Pact in April, 1949.

Norwegians, closely akin to the Swedes and Danes, are of Teutonic origin. In the 7th and 8th centuries, Vikings from Norway constantly attacked the British Isles, and in the 9th century many of them settled in what are now Ireland and Normandy. Norway became a united kingdom in 872 under King Harald Haarfager. Christianity was introduced in the 10th century by King Olaf I.

Under the rule of Haakon IV (1217-63), Norway reached a peak of power, ruling the Shetland and Orkney Islands, Iceland, Greenland and the Hebrides. In 1319 Norway and Sweden were united under King Magnus VII, and in 1397 Denmark joined this union under Erik of Pomerania.

In 1450 the triple bond gave way to a union in which Norway was closer to Denmark, but the Treaty of Kiel, in 1814 at the end of the Napoleonic Wars, ceded Norway to Sweden. Norway protested and declared itself independent. Sweden thereupon invaded Norway and forced the issue, requiring Norway to recognize the king of Sweden but leaving Norway its own government, army, navy and customs.

After this union was dissolved in 1905, Prince Karl of Denmark was elected king of Norway by the Storting (parliament) and ascended the throne as Haakon VII. During World War I, Norway was able to preserve its neutrality, though it suffered greatly from the Allied blockade and from the loss of many merchant ships. In World War II, Norway was invaded by the Germans on April 9, 1940, and resisted for two months before Nazi control was complete. On June 7, King Haakon and the government fled to London and established a government-in-exile.

Meanwhile, in Norway, a new word was born—quisling. It was derived from Major Vidkun Quisling, a Norwegian traitor who collaborated with the Germans and who was Minister President of the German-sponsored occupation government.

Quisling eventually was executed by the Norwegians in October, 1945.

King Haakon and the government returned immediately after the German collapse in May, 1945, and an interim coalition cabinet took over, headed by Einar Gerhardsen. The latter's Labor party won a majority in the general elections of Oct. 8, 1945, and the all-Labor cabinet formed on Nov. 5, 1945, has since led the nation.

King Haakon VII, born August 3, 1872, second son of Frederick VIII of Denmark, married Princess Maud (born 1869, died 1938), third daughter of Edward VII of England. Their one son—Olaf, Crown Prince, born July 2, 1903—married Princess Märtha of Sweden (born 1901) on March 21, 1929. Their children are Princess Ragnhild Alexandria (born 1930), Princess Astrid (born 1932) and Prince Harald (born 1937). King Haakon is the uncle of Frederick IX of Denmark.

GOVERNMENT AND DEFENSE. Norway is a constitutional and hereditary monarchy with succession in the direct male line. The king's executive power is exercised by a council of state, or cabinet, consisting of the prime minister and at least seven other councilors. The 150 members of the Storting are popularly elected for a term of 4 years under proportional representation. When assembled, the Storting divides itself by election into two sections, the Lagting, composed of one-fourth of the members (38) and the Odelsting, composed of the rest. The Storting has a predominant position in the government since the cabinet is responsible to it. Moreover, the king cannot dissolve it before the expiration of its term. There is universal suffrage for all citizens, male or female, over 23. Party representation in the Storting (elections of Oct. 8, 1945) is Labor, 76; Conservative, 25; Liberal, 20; Communist, 11; others, 18.

The department of defense serves as a coordinating body for the army, navy and air force. The army is a national militia with compulsory service from 18 to 55. Army strength in 1947 was about 15,000, including 4,400 stationed in the British zone of Germany. The air force had 100 planes. The Navy, on Dec. 31, 1949, had 6 destroyers, 7 destroyer escorts, 5 submarines, 3 corvettes, 2 fleet minesweepers and various minor vessels.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory and free from 7 to 14. Illiteracy is almost unknown. In 1946, elementary schools had an enrollment of 289,449, and secondary schools had 44,358. The University of Oslo had 6,106 students in 1947; a second university was opened at Bergen in 1948.

The endowed state religion to which the

king must conform is Evangelical Lutheran. The king nominates the clergy of the established church, which takes a leading part in primary education. All other Christian religions are tolerated, but Jesuits are barred.

From 1820 to 1920, more than 800,000 Norwegians emigrated, 96 per cent of them to the United States.

The well-advanced social welfare program includes social security, introduced late in the 19th century, poor relief, care of mothers and children, schools for the blind, deaf and deformed, housing, training of social workers, and old-age pensions. Labor is protected by a number of acts which provide for vacations, arbitration of disputes, and unemployment, accident and sickness insurance. The co-operative movement is well-organized.

Land suitable for cultivation, estimated at less than 5 per cent of the total area, consists of strips in the deep narrow valleys and around firds and lakes. Food-stuff production is insufficient to meet domestic needs. Leading crops, with 1949 production in metric tons, are wheat, 61,000; barley, 83,000; oats, 147,000; potatoes, 1,072,000; and hay and fodder. The country is more adapted to stock raising than to crop growing; in 1949, there were 1,122,000 cattle, 1,808,000 sheep and (1948) 145,000 goats.

Raw materials produced in Norway form the basis of most of the manufactures. In 1946 there were 5,488 industrial establishments with 159,092 workers and gross production valued at 4,054,417,000 kr. Leading industries are food, machinery, metals, wood, paper and electro-chemicals. On Mar. 31, 1950, 63 vessels of 90,486 tons were under construction in Norwegian yards. Industrial production in April, 1950, was 143 per cent of the 1937 level.

Statistics of foreign trade are as follows, in millions of kroner:

	1947	1948	1949
Exports	1,820	2,063	2,138
Imports	3,820	3,708	4,218

In 1949 the leading suppliers were Britain, 21.3 per cent; Sweden, 14.0 per cent; the U. S., 13.2 per cent; and Belgium, 6.5 per cent. Leading customers were Britain, 18.1 per cent; Sweden, 9.5 per cent; Denmark, 7.0 per cent; and the U. S., 6.9 per cent. Chief exports were pulp, paper and cardboard (39%), fish and fish products (19%), fish oils and nonferrous metals. The normally adverse trade balance is offset to some extent by invisible exports, particularly the earnings of the large merchant marine.

Norway is one of the greatest seafaring nations, and its merchant fleet of 2,069

(100 gross tons or over) vessels of 4,916,396 tons (June 30, 1949) is the third largest in the world. War-time losses amounting to 2,393,000 tons were the third highest among the United Nations. The long coast line and the difficulties of inland transportation make coastal shipping especially important. In 1947 there were 2,832 miles of railway, all but 52 miles nationalized, and, in 1947, 27,495 miles of highway.

The 1950-51 budget estimated revenue at 2,553,000,000 kr. and expenditure at 2,278,000,000 kr. The national debt on Dec. 31, 1949, was 5,153,000,000 kr.

Mineral resources are extensive, but coal deposits are entirely lacking except in Spitsbergen. The most important minerals (1949 production, in metric tons) are: iron ore (276,865), aluminum (35,047), pyrite ore (745,367), zinc (41,040), copper ore, molybdenum ore, tungsten, tin and silver. Cheap electrical power, produced mainly by hydroelectrical plants (average monthly production 1949: 1,265,000,000 kwh.), makes possible the extraction of nitrogen from the air and manufacture of potassium nitrate, an important fertilizer.

The forests, largely in the south and southeast, are one of the chief natural resources. About 25 per cent of the total area is covered with forests, of which 70 per cent is pine. Timber production in the 1949-50 season was about 6,000,000 cu. m., and pulpwood used in the production of chemical and mechanical pulp in 1949 was 1,350,741 metric tons. Paper production in 1949 was 464,502 metric tons.

Fishing is one of the principal industries, engaging as many as 100,000 persons annually. A large number of the best European food fisheries are situated along the coast. The 1949 catch totaled 1,035,000 metric tons valued at 295,000,000 kr. Norwegians are the world's leading whalers and were the first to develop pelagic (open sea) whaling. Whale-oil production in the 1948-49 season was 2,206,641 barrels.

TOPOGRAPHY AND CLIMATE. Nearly 70 per cent of Norway is uninhabitable and covered by mountains, glaciers, moors and rivers. Its extreme length from the Skagerrak to North Cape—Europe's most northerly point, far above the Arctic Circle—is about 1,100 miles. Breadth averages 60 miles, with a maximum of 260. The hundreds of deep fjords that cut into Norway's coast line give it an over-all ocean front of more than 12,000 miles. Along the Swedish border are the rugged Kjölen (Keel) Mountains, and northeast of Bergen are the highest of Norwegian mountains, with Galdhøpiggen rising to 8,097 feet. Islands off the coast, numbering almost 150,000, form a breakwater and make a safe coastal shipping channel. The Lofoten and Vesterålen Islands, off the northwest coast, have

an area of about 1,560 square miles and are a cod fishing center.

Norway has many rivers and lakes. Most of the rivers are short and swift, with numerous falls, and are invaluable as sources of hydroelectric power. By increasing the development of such power, Norway hopes to free itself from the necessity of importing coal, of which it has almost none.

The Gulf Stream affects the climate mildly. Summer temperatures range from about 50° in the extreme north to 60.6° at Oslo in July. February temperatures in Oslo average 24°, against 11° to -12° in the north. Norway is one of the lands of the midnight sun; in the extreme north for many weeks in the summer the sun never sets, and for an equal time in the winter the sun does not rise. Rainfall is heavy on the coast but decreases sharply inland.

OUTLYING TERRITORIES

SPITSBERGEN (SVALBARD).

This arctic archipelago, with an area of approximately 25,000 square miles, lies about 400 miles north of Norway and consists of West Spitsbergen (15,200 sq. mi.), North-East Land (about 6,000 sq. mi.), Edge Island (2,500 sq. mi.), Barents Island (580 sq. mi.), and several small islands including Bear Island. The group was probably discovered by Norwegians in A.D. 1194 and rediscovered by the Dutch navigator Barents in 1596. The question of sovereignty was long unsolved. By a treaty signed with the disputing nations on Feb. 9, 1920, however, Norwegian sovereignty was recognized, and Norway declared the area a part of the kingdom Aug. 14, 1925. Spitsbergen was occupied by Allied forces in the summer of 1941. Soviet proposals for establishment of joint military bases were rejected by Norway in Feb., 1947.

In the 18th and 19th centuries, Spitsbergen was a whaling center, but now the only important product is coal (1949: 455,198 metric tons). Population (1946-47), largely miners, none indigenous: 1,551.

JAN MAYEN ISLAND.

This arctic island (144 sq. mi.), lying between Greenland and the north of Norway, was discovered by Henry Hudson in 1607. It was annexed to Norway May 8, 1929. A Norwegian weather station was established in 1921, and during World War II a U. S. Navy weather station was maintained on the island. It is otherwise uninhabited.

OTHER TERRITORIES. Norway also exercises sovereignty over Bouvet Island (22 sq. mi.) in the South Atlantic, Peter I Island (94 sq. mi.) in the Antarctic Ocean, and that part of the Antarctic continent lying between 20 degrees and 45 degrees east. All are uninhabited.

Outer Mongolia. See Mongolian People's Republic

Palestine

Area: 10,159 square miles.

Population (est. 1946): 1,912,110.

Density per square mile: 188.2.

Principal cities (est. 1946): Jerusalem, 164,440 (religious center); Tel Aviv, 183,200 (Jewish communal center); Haifa, 145,430 (chief port); Jaffa, 101,580 (seaport).

Languages: English, Hebrew, Arabic.

Religions (est. 1946): Mohammedan, 59.7%; Jewish, 31.7%; Christian, 7.5%; others, 1.1%.

HISTORY. The history of Palestine, cradle of two of the great religions of the world, is mostly a chronicle of invasion, conquest and confusing divisions. To the ancient Hebrews it was known as the "Land of Canaan"; the name Palestine is derived from that part of the country inhabited by the Philistines of Biblical times. About 1000 B.C. the Hebrews succeeded in establishing a single monarchy, which later split up into two kingdoms—Judah and Israel. The country was subsequently invaded and overcome by many peoples, including the Assyrians, Babylonians, Egyptians, Persians, Macedonians, Romans and Byzantines. In A.D. 634-36, Palestine was wrested from the Byzantine Empire by the Arabs. Frankish Crusaders captured Jerusalem in 1099 and set up a feudal kingdom which endured until the defeat of the Franks by Saladin (1187) and the restoration of Moslem rule. In 1516 suzerainty over the area was transferred from the Mamelukes of Egypt to the Turks. It remained part of the Ottoman Empire until World War I, when British forces under General Allenby defeated the Turks and captured Jerusalem (Dec. 9, 1917). The League of Nations mandate awarded to Britain was put in force Sept. 29, 1923.

Meanwhile, a movement had been founded in 1897 by Theodor Herzl to create a Jewish homeland in Palestine, and a considerable number of Jewish immigrants had entered the country prior to World War I. On Nov. 2, 1917, official British recognition was given both to the growing Arab nationalist movement and to the Zionist aspirations by the issuance of the so-called Balfour Declaration.

The declaration was attacked by the Arabs. Throughout the period between the two World Wars, outbreaks of violence and open revolt occurred. Jewish immigration continued, especially after the rise of Hitler. A British royal commission report approved by the British Government July 7, 1937, recommended the partition of Palestine into an Arab and a Jewish state separated by a mandated area in the vicinity of Jerusalem and at Nazareth. The

Arabs opposed the proposal, advocating instead the establishment of an independent Palestine with full minority rights for the Jews. In May, 1939, the British Government issued a White Paper declaring the establishment of a Jewish state contrary to British obligations to the Arabs and promising, after a transitory period of ten years, the establishment of an independent Palestine in which Arabs and Jews would share authority in government. During the next five years, 75,000 Jews were to be allowed to enter Palestine. These proposals did not satisfy either party, and the League Mandates Commission questioned their validity, but the outbreak of World War II overshadowed all other issues.

Arab-Jewish co-operation in the war effort introduced a period of order, but the end of European hostilities in 1945 brought a renewal of friction and the formation of the Arab League in that year served to demarcate lines of opposition. By 1946, there were many acts of terrorism by the Irgun Zvai Leumi, an illegal army, and the Stern Gang, both of which were repudiated by the Jewish Agency for Palestine. In July, 1946, a proposal was made in London for a federalized Palestine consisting of Arab, Jewish and British districts and subject to a British-controlled central government. This "Morrison Plan" had British support, but was unacceptable to President Truman and was attacked by Arabs and Jews alike.

Attempts to bring Jewish immigrants into Palestine illegally were intensified thereafter, and terrorism grew apace. Meanwhile, on Feb. 14, 1947, the Attlee government referred the whole problem to the United Nations for advice. The majority report of a special U. N. investigating committee recommended to the General Assembly in Sept., 1947, that Palestine be partitioned into Arab and Jewish states which would be independent politically but united economically. Jerusalem would be under international trusteeship. The minority recommended a federal unitary state similar to that proposed by Britain in Feb., 1947 and rejected by both sides.

Acceptance of the majority report by the U. N. General Assembly on Nov. 29, 1947 touched off new outbreaks of violence which British troops had difficulty in controlling. The decision was generally accepted by the Jews, but members of the Arab League announced their determination to resist partition by force, if necessary.

The Security Council voted on April 2, 1948, to call a special session of the General Assembly to reconsider the partition plan and possibly to put Palestine under temporary U. N. trusteeship. Instead, the Assembly, without disturbing the parti-

tion plan, voted on May 14 to send a U. N. mediator to Palestine to attempt to secure peace. Count Folke Bernadotte of Sweden was unanimously chosen mediator, May 20.

Termination of the British mandate on May 14 and withdrawal of British forces brought new violence. An independent state of Israel was immediately proclaimed by the Jewish National Council, and Arab forces converged on Palestine from the south, north and east, spearheaded by the crack British-trained Arab Legion of King Abdullah of Jordan. Within a few hours Arab-Jewish hostilities were in full swing. On June 1, however, both sides accepted a Security Council request for a four-week truce which went into effect on June 11. Count Bernadotte's efforts to effect a compromise were unsuccessful, and on July 9 hostilities were resumed. On July 15 the Council voted to invoke for the first time Article 39 of the U. N. Charter; it declared the situation a menace to world peace and effected an indefinite truce by threatening to employ sanctions or military force to end the conflict. By July 21 all fighting had again ceased and Count Bernadotte resumed his efforts to bring about a lasting compromise. He was assassinated on Sept. 17 within the Israeli-held area of Jerusalem by Jewish dissidents, and his duties were taken over by Dr. Ralph Bunche.

Fighting broke out again in October, 1948, on the southern front, in the course of which Israeli forces made important gains against Egyptian positions in the Negeb and even penetrated a short distance into Egypt before the final cease-fire took effect on Jan. 7, 1949.

On Feb. 24, 1949, Israel and Egypt concluded an armistice agreement, the general effect of which was to freeze Israeli and Egyptian positions, with some exceptions, without prejudice to a final political settlement. Israel and Jordan concluded a similar pact on April 3 in respect to central and eastern Palestine and Jerusalem.

The U. N. continued its efforts to effect a definitive settlement of the controversy, thus far without avail. Particular controversy has attended efforts to settle the future status of Jerusalem.

GOVERNMENT. After the termination of the British mandate, the provisional government of Israel became the de facto authority in areas of Palestine occupied by Israeli forces—somewhat over half the total area. In Feb., 1949, the provisional regime gave way to a regularly constituted government set up under the constitution adopted by a popularly elected Constituent Assembly.

In April, 1950, Arab-held eastern and central Palestine, including the Old City of

Jerusalem, was incorporated into Jordan by action of the Jordani parliament.

SOCIAL AND ECONOMIC CONDITIONS. From 1922 until 1944 the estimated increase in the population was 987,576; the estimated increase among Jews was 444,912, among Moslems 472,100 and among Christians 64,083. Four-fifths of the increase in the Jewish population was attributable to immigration, while the increase in the Moslem population was attributable to the high birth rate. A large proportion of the Palestine Christians are Arabs. One of the first acts of the new Israeli Government was to lift all restrictions on Jewish immigration.

Palestine is the Holy Land for Jew and Christian alike and, to some extent, for the Moslems, whose Mosque of Omar stands in Jerusalem. In addition to Jerusalem, historic towns include: Bethlehem, the birthplace of Jesus; Nazareth, in Galilee, His boyhood home; Jericho, famous in both the Old and New Testaments; Hebron, one of the oldest inhabited cities in the world; the ancient town of Beersheba; Acre, near Mt. Carmel; and Askalon, on the coast.

Agriculture remains Palestine's chief industry. The maritime plain, the Plain of Esdraelon, and the northern Jordan Valley are the principal agricultural areas. Citrus growing, confined largely to the maritime plain, normally furnishes the major export crop. Others include olives, rice, fresh fruits and vegetables, figs, tobacco, wheat, barley, maize, sesame and potatoes. The dairy industry has made rapid progress, especially on Jewish farms.

Palestinian industry has also developed substantially during the past 15 to 20 years. In addition to the manufacture of consumers' goods for home consumption, articles prepared for export include Dead Sea chemicals, glass, shoes and soap. During World War II, Palestine became one of the world's leading diamond cutting centers. Refineries and storage tanks of the Iraq Petroleum Co., are located at Haifa, a terminus of the pipeline from the Iraq oilfields.

Principal articles of export are citrus fruit and juices, edible oils, asphalt, fuel oils, polished diamonds and glass. Leading import items aside from petroleum include grain, livestock, milk powder and fish.

COMMUNICATIONS. Palestinian railways in 1947 included 352 miles of broad gauge and 91 miles of narrow gauge (Hejaz railway). All-weather roads (1947) totaled 1,716 miles, and seasonal road, 1,255 miles. The chief airport is at Lydda.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Palestine is a plateau traversed from north to south by moun-

tains and broken by great depressions, also running from north to south. The maritime plain is remarkably fertile. The Jordan, the only important river, rises in Syria and flows south along the Jordan border through Hule marshes and lake, and the Sea of Tiberias (Sea of Galilee) into the Dead Sea, 1,290 feet below sea level.

Mineral resources are limited. The chief minerals of commercial importance are potash, gypsum, sulfur, limestone and rock salt. The Dead Sea contains many valuable dissolved salts, and petroleum and bitumen exudations are found around its southern end. There are few forested areas, and wood is a major import in normal years.

Summers are hot and dry in Palestine, with occasional maximum temperatures of 100°, although 80°-90° is the more normal maximum. In the Jordan valley, noted for its climatic extremes, the thermometer occasionally reaches 130°; it may range from freezing point to 80° within 24 hours. The mean annual temperature at Jerusalem is 62.8°, with February the coolest month (47.2° mean) and August the hottest (76.3° mean). Rainfall throughout Palestine occurs chiefly in autumn and spring; the mean annual average is 28 inches along the coast and 26 inches in Jerusalem.

(See also ISRAEL and JORDAN)

Panamá (Republic)

(República de Panamá)

Area: 28,575 square miles.

Population (est. July 1, 1949): 763,800 (1940: mestizo, 65.34%; Negro, 13.31%; white, 11.07%; Indian, 9.53%; others, 7.5%).

Density per square mile: 26.7.

President: Arnulfo Arias.

Principal cities (est. 1949): Panamá City, 146,100 (capital and chief port); Colón, 54,300 (chief Caribbean port); Ciudad David, 13,700 (bananas).

Monetary unit: Balboa.

Language: Spanish (official).

Religion: Roman Catholic, 93%; Protestant, 6%; others, 1%.

HISTORY. Visited by Columbus in 1502 on his fourth voyage and explored by Balboa in 1513, Panamá was the principal transshipment point for Spanish treasure and supplies to and from South and Central America in colonial days. In 1821, when Central America revolted against Spain, Panamá joined Colombia, which already had declared its independence. For the next 82 years, Panamá attempted unsuccessfully to break away from Colombia. After U. S. proposals for canal rights over the narrow isthmus had been rejected by the Colombian Senate, Panamá proclaimed

its independence with U. S. backing in 1903. U. S. Marines restrained Colombian intervention on the ground that the U. S.-Colombian treaty of 1846 gave the United States the right to keep the isthmus open.

For canal rights in perpetuity, the United States paid Panamá \$10,000,000, and agreed to pay \$250,000 (\$430,000 after devaluation of the U. S. dollar in 1933) each year. In exchange, the United States got the Canal Zone, a ten-mile-wide strip across the isthmus, and a considerable degree of influence in Panamanian affairs. Since 1903, Panamá's government generally has been stable, with orderly presidential succession. Arnulfo Arias, a pro-Axis president, was ousted and exiled in 1941, and succeeded by Dr. Adolfo de la Guardia.

During World War II the U. S. was granted the right to establish a number of bases in Panamá. All were evacuated in 1948 after the Assembly rejected a 10-year lease agreement on Dec. 22, 1947.

Enrique A. Jiménez was elected provisional president in 1945 by the National Assembly, which later extended his term to Oct. 1, 1948. The presidential election of May, 1948, was extremely close and the subject of heated controversy. The government candidate, Domingo Díaz Arosemena, was declared the victor by the national election jury on Aug. 7, and he took office on Oct. 1. He died Aug. 23, 1949 and was succeeded by Daniel F. Chánis, Jr., the first vice president. Following a hectic week in late Nov., 1949, the national police installed Arnulfo Arias as president.

GOVERNMENT. Under the 1946 constitution, the Assembly and the president are elected for six-year terms, with the president ineligible to succeed himself. Panamá has no army or navy, but has a national police corps numbering 2,000.

SOCIAL AND ECONOMIC CONDITIONS. Although education is free and compulsory between 7 and 15, illiteracy is very high in Panamá. In 1949, there were 922 primary schools with 101,249 students and 15 secondary schools with 7,155 students; the national university at Panamá City enrolled 1,343 students.

About five-eighths of the nation is unoccupied. A fourth of the population is in Colón and in Panamá City, the oldest white settlement on the Pacific coast of the Americas. In the cities, the lower classes are Negro and Negroid, descendants of British West Indian laborers on the canal. Once literally a pest hole from coast to coast, Panamá has been made into one of the healthiest of the tropical nations through U. S. sanitation methods introduced by Canal Zone officials.

Bananas are the main agricultural crop; others are cacao, tobacco, abacá, rubber, rice, coffee and sugar cane, all of which are

exported, as are cattle, hides and gold. Imports in 1949 were \$62,148,370 and exports \$11,050,305. Chief exports were bananas (61%) and abacá (14%). Leading customers were the U. S. (88%), the Netherlands and Colombia; leading suppliers, the U. S. (75%), the Canal Zone and Britain.

The Panama Canal is the country's biggest economic asset. About a third of the national income is ordinarily derived from the wages of Panamanians working in the Canal Zone, or from cash spent by U. S. personnel in the Zone. The national budget for 1950 balanced revenue and expenditure at \$32,245,919. The public debt on Dec. 31, 1949, was \$27,481,225.

The main railway is the U. S. Government-owned Panamá Railroad, 47.64 miles long, bridging the isthmus from Panamá City to Colón. All rail mileage in 1949 totaled 223; highway mileage in that year was about 1,100. In recent years many foreign ships have been registered in Panamá to escape high labor costs and governmental regulations in other nations; in 1949, the merchant marine consisted of 535 vessels (100 tons and over) of 3,016,227 gross tons, one of the largest in the world.

Minerals include gold, oil, copper and platinum near the Colombian border, but transit shortcomings have hampered development. Forest resources include mahogany, copaiba, sarsaparilla and ipecacuanha. Pearl fishing is a minor industry.

TOPOGRAPHY AND CLIMATE. Panamá, roughly the size of South Carolina, runs east to west for 420 miles from Costa Rica to Colombia, and has a maximum width of 118 miles, with 477 miles of Caribbean coast and 767 on the Pacific. At the narrowest and lowest point, the canal bisects the country. Outlying islands number about 630 in the Caribbean and 116 in the Pacific. Panamá steps up from coastal lowlands, with extremely heavy rainfall, to upland valleys and plateaus covered by dense forest and a few mountain peaks, some volcanic, near the Costa Rican border. Its many rivers are not navigable.

Paraguay (Republic) (República del Paraguay)

Area: 154,165 square miles.
Population (est. 1949): 1,304,000 (Paraguayan, 97%; Indian, 3%).

Density per square mile: 8.5.

President: Federico Chaves.

Principal cities (est. 1948): Asunción, 130,067 (capital); Villarrica, 31,081 (sugar, tobacco); Concepción, 16,487 (port, Paraguay River); Encarnación, 16,078 (rail terminus).

Monetary unit: Guaraní.

Languages: Spanish (official), Guaraní.

Religion: Roman Catholic (official).

HISTORY. Paraguay, a landlocked South American country with a good river outlet to the South Atlantic, is about the size of Montana and, more often than not, is under the rule of a dictator-president.

In 1526 and again in 1529, Sebastian Cabot explored the area when he sailed up the Paraná and Paraguay Rivers. Domingo Martínez de Irala, a Spaniard, founded Asunción in 1537 and became the dominant figure in Paraguay for the next two decades. From 1608 until their expulsion from the Spanish dominions in 1767, the Jesuits maintained an extensive establishment in the south and east of Paraguay. In 1811 Paraguay revolted against Spanish rule and became a nominal republic under two consuls, one of whom, Dr. José Rodríguez Francia, ruled as absolute dictator until his death in 1840. His dictator successor, Carlos Antonio López, was succeeded in 1862 by his son, Francisco Solano López, under whose leadership Paraguay lost a good part of its population in a disastrous five-year war with Argentina, Brazil and Uruguay. In the succeeding decades, economic progress was handicapped by revolution, intrigue and corrupt government. Paraguay remained neutral in World War I. Economic and financial exhaustion resulted from the war with Bolivia (1932-35), after which Paraguay was awarded three-fourths of the disputed Gran Chaco region (1938).

General José Félix Estigarribia, elected president constitutionally in 1939, was killed a year later in a plane crash. General Higinio Morínigo took over and held office, despite several abortive revolts and a 6-month civil war in 1947, until June, 1948, when he was ousted. Juan Natalicio González, elected president in the Feb., 1948, elections, took office Aug. 15, but successive revolts on Jan. 30 and Feb. 26, 1949, ousted him and his successor. The leader of the latter revolt, Felipe Molas López, was elected president on Apr. 17, but gave way to Federico Chaves in another internal upheaval on Sept. 11, 1949.

GOVERNMENT AND DEFENSE. Since adoption of the 1940 constitution, Paraguay has been a semi-authoritarian republic which elects a president every five years by popular vote, and a one-house Congress on a population basis. There is also a Council of State, somewhat equivalent to an upper house, its members named by the government. The presidentially-appointed cabinet administers the government and is required merely to inform the Congress and Council of its policy.

The army numbers approximately 5,000. Military service is compulsory for two years. For patrolling the Paraguay River, the country's life line, there is a navy of about 1,400 men with four gunboats. The

budget share allotted to defense averages 50 per cent.

SOCIAL AND ECONOMIC CONDITIONS. The illiteracy rate is unofficially estimated at 60 per cent, one of the highest in South America. Education is free and supposedly compulsory. In 1947 there were 185,000 pupils attending 1,312 elementary schools. The University of Paraguay at Asunción had 1,300 students in 1946, and there were several normal and agricultural schools.

The Paraguayans are a homogeneous blend of Spanish, Portuguese and Italian, with considerable Guaraní Indian blood. There are almost no Negroes; the 35,000 to 50,000 uncivilized Indians live mainly in the Chaco. The country is 90 per cent bilingual, with Guaraní dominating over Spanish (the official language) in rural areas.

A well-favored land, Paraguay is predominantly a cattle country, keeping about 3,000,000 head. The soil is fertile and the climate suitable for subtropical crops. The chief cash crop is cotton (acreage: 150,000; 1949 ginned output: 12,000 metric tons); the staple food crop is manioc. Other crops are rice, maize, yerba maté, tobacco, sugar, peanuts and fruits. Oil of petit-grain, an important perfume ingredient, is extracted from the leaves of the bitter orange. Aside from the production of canned meat (about 15,000 tons yearly) and quebracho extract, the manufactures of the country are only slightly developed, but show steady growth.

Exports in 1949 were valued at \$32,880,000 and imports at \$28,480,000. Argentina, the U. S. and Britain were the leading customers and also the principal suppliers. Chief exports are hides, timber, cotton and quebracho extract.

River traffic, the principal means of communication, was monopolized until recently by an Argentine company, but the Paraguayan river fleet is of increasing importance. The Paraguay river is navigable for vessels of 12 ft. draft to Asunción, principal shipping point, and Concepción; and for smaller vessels for its entire length. The Alto Paraná is navigable for larger vessels for almost its whole length. Railway mileage in 1947 was 749. In 1949 there were 475 miles of modern highways.

Domestic air service is furnished by the nationalized Línea Aérea de Transporte Nacional (LATN). Several foreign lines supply international service.

The 1950 budget called for expenditures of 112,900,000 guaranis and revenue of 98,300,000 guaranis. The national debt in 1947 was 100,884,975 guaranis.

Paraguay's mineral deposits are small, except for manganese in the near-inaccessible northeast. In the western Chaco, a U. S. oil company has been exploring for oil. Forest resources are considerable, es-

pecially in the Chaco. Quebracho—the "Axe-breaker," a wood so heavy that it will not float—is the principal commercial tree. The wood has many uses, from paving blocks to ox-cart wheels. Quebracho tannic extract (1948 exports: 36,000 metric tons) is the chief product. Its export is limited by agreement with Argentina, also a heavy producer.

TOPOGRAPHY AND CLIMATE. Eastern Paraguay, between the Paraná and Paraguay Rivers, is upland country with the thickest population settled on the grassy slope that inclines toward the Paraguay River. The greater part of the Chaco region, to the west, is covered with marshes, lagoons, dense tropical forest and jungle. In the east, the temperature averages about 81° in summer (December-February) and 64° in winter (May-August). From Asunción, with an annual average greater than 60 inches, the rainfall decreases in the west.

Peru (Republic) (República del Perú)

Area: 482,133 square miles.

Population (est. 1949): 8,277,031 (white and mestizo, 53%; Indian, 46%; Asiatic, Negro and others, 1%).

Density per square mile: 17.2.

President: Manuel A. Odría.

Principal cities (est. 1949): Lima, 800,460 (capital); Arequipa, 95,230 (commercial center); Callao, 85,892 (port of Lima); Cuzco, 54,292 (ancient Incan capital); Trujillo, 46,304 (mining).

Monetary unit: Sol.

Languages: Spanish, Quéchua, Aymará (Indian).

Religion: Roman Catholic.

HISTORY. Peru, once part of the great Incan empire and later the major viceroyalty of Spanish South America, is more than three times the size of California. It was conquered in 1531-33 by Francisco Pizarro. On July 28, 1821, Peru proclaimed its independence, but the Spanish were not finally defeated until the Battle of Ayacucho on Dec. 9, 1824. For a hundred years thereafter the Peruvian course was rough. Revolutions were frequent, and a new war was fought with Spain in 1864-66. The dispute with Chile over Tacna and Arica was not finally settled until 1929, and war with Colombia over the Leticia Corridor was narrowly averted in 1931. Major economic development, mostly by foreign capital, began late in the last century. In World Wars I and II, Peru enjoyed cotton and copper booms. General Oscar Benavides became president in 1933 and vigorously set about suppressing popular rights and representative government. He was succeeded in 1939 by President Manuel Prado y Ugarteche.

Peru emerged from 20 years of dictatorship on July 28, 1945, with the inauguration of President José Luis Bustamante y Rivero after the first free election in many years. However, the change to a regime in which political prisoners were freed and the press was free to criticize was soon tempered by factional troubles within the government. As a result, in a cabinet reorganization of Jan. 12, 1947, three members of the leftist APRA party, which had contributed largely to Bustamante's election, were eliminated. The rightist-APRA cleavage came to a head on Oct. 28, 1948, when an army-led rightist revolt headed by Gen. Manuel A. Odría ousted Bustamante. Odría became provisional president on Oct. 31. He was unopposed in presidential elections held July 2, 1950.

GOVERNMENT AND DEFENSE. Under the 1933 constitution, Peru elects by popular vote every six years a president, two vice-presidents and a bicameral Congress—a Senate of 50 members and a Chamber of 153 members. The president is ineligible to succeed himself. The cabinet, headed by the prime minister, is presidentially appointed, while Supreme Court judges are elected by the Congress from a presidential list. The central government names the executives of the 24 departments.

Military service is compulsory at the age of eighteen. The army had about 32,000 men in 1950. The air force, with 1,935 men and 90 planes in 1940, received 50 U. S. lend-lease craft in 1942. The 1950 navy had two old cruisers, two destroyers, four submarines, six river gunboats and smaller units. There are about 10,000 police and civil guards.

SOCIAL AND ECONOMIC CONDITIONS. Peru, once the cultural center of Spanish South America, has an illiteracy rate of over 50 per cent. Education between 7 and 14 is free, compulsory and state-controlled. Primary schools numbered 8,900 in 1947 and enrolled 810,000; State secondary schools had 35,000 students in 1946. Secondary education is also offered in about 100 schools of religious orders. Five universities had 8,282 students in 1943, including the University of San Marcos, founded in 1551 (oldest in America) with 6,241. In 1946 the government announced an ambitious 5-year plan for building schools.

Most Peruvians are of mixed Spanish and Indian blood. The Indians come from three main stocks—Quéchua, Aymará (Colla) and Chunchu. The relatively large Asiatic population numbered 41,945 in 1940; in 1939 there were 22,738 alien Japanese.

Compulsory social security, established in 1936, covers illness, maternity, disability, old age and death; benefits are steadily being extended.

Land under cultivation is estimated at about 3,617,000 acres, or 12 per cent of the total area, with more than 80 per cent of the population being dependent upon agriculture. About one-eighth of the cultivated area in the irrigated coastal valleys of the central region is devoted to cotton, the most important crop (1949 production: 65,000 metric tons). Sugar (1949: 493,073 tons), rice, tobacco and coffee are exported, while wheat, corn, potatoes, beans, barley and quinoa (a grain similar to millet) are subsistence crops. Stock-raising, pursued in the Pacific highlands and the elevated parts of the Amazon slope, supplies most of the country's meat needs, as well as wool, hides and skins for export. Llamas, used as beasts of burden, and vicuñas and alpacas, noted for their wool, are native to Peru. Livestock in 1948 was estimated at 2,261,995 cattle, 17,287,624 sheep, 982,471 goats and 2,449,746 llamas and alpacas.

Industrialization has been slow. Aside from the copper smelters and oil refineries, the greatest progress has been made in the textile industry, which obtains its raw materials from domestic cotton and wool and from imported silk.

Foreign trade statistics, in millions of soles, are as follows:

	1947	1948	1949
Exports	1,003	1,056	2,108
Imports	1,092	1,091	2,692

Chief exports in 1949 were cotton (29%), sugar (16%) and petroleum and products (14%). Chief suppliers were the U. S. (63%) and Britain (8%); chief customers, the U. S. (29%), Chile (17%) and Britain (15%). Principal imports are machinery and motor vehicles, foodstuffs (especially wheat), iron and steel manufactures, electrical goods and chemicals.

Highway mileage in 1948 totaled 19,434, of which more than a third is hard-surfaced; the Pan-American highway had a total Peruvian length of 1,818 miles. Railway mileage (1947) was 2,612, much of it over difficult territory. Several airlines supply domestic and international service. There are more than 5,400 miles of navigable tributaries of the Amazon in eastern Peru; the chief Amazon port is Iquitos, 2,653 miles from the Atlantic.

The 1950 budget balanced revenue and expenditure at 1,644,500,000 soles. The public debt on Dec. 31, 1949, was 1,621,996,110 soles. Foreign capital has played a large part in Peruvian economic development.

Peru has vast mineral resources. It ranks fourth in world silver production and mines about 25 per cent of the world's vanadium. But mining is second to agriculture, and nearly all of it is in the hands of foreign capital. Petroleum and copper are the most important, with the latter controlled by

the American-owned Cerro de Pasco Corporation, which also accounts for much of the gold and silver output. In 1949, gold production was 119,000 oz.; silver, 10,288,000 oz.; copper, 24,000 metric tons; lead, 57,000 tons; and zinc, 68,000 tons. Petroleum production was 14,796,093 barrels; discovery of rich new deposits has been reported.

Forest products include rubber (1948: 1,789 short tons), balatá, raw quinine, vegetable ivory, mahogany, cedar, dye woods and coca, the source of cocaine. An important industry on the outlying islands is the gathering of guano (bird excrement), a valuable fertilizer used almost entirely domestically.

TOPOGRAPHY AND CLIMATE. The Andes Mountains divide Peru into three sharply differentiated zones. To the west is the coastland, much of it arid, extending for 50 to 100 miles inland, and 1,400 miles long. The mountain area, with peaks over 20,000 feet high, lofty plateaus and deep valleys, lies centrally. Beyond the mountains to the east is the heavily forested slope leading to the Amazonian plains.

The climate ranges from tropical in the eastern lowlands to arctic among the snow-capped peaks. The coastal area has an average annual rainfall of less than 2 inches and temperatures ranging between 55° and 98°. Temperatures range from 75° to 95° in the humid Montaña, and rainfall between 75 and 125 inches annually.

The Philippines (Republic)

Area: 114,400 square miles.

Population (census 1948): 19,234,182 (Filipino except [1940] 117,461 Chinese, 29,262 Japanese, 8,739 Americans and 11,515 others).

Density per square mile: 168.1.

President: Elpidio Quirino.

Principal cities (census 1948): Manila, 983,906 (capital, chief port); Cebu, 167,503 (seaport); Davao, 111,263 (seaport); Iloilo, 110,122 (seaport); Zamboanga, 103,317 (seaport); Ormoc, 72,733 (seaport).

Monetary unit: Peso.

Languages: English, Tagalog, Bisayan, Spanish, Ilocano, Bicol.

Religions (census 1939): Roman Catholic, 78.7%; Aglipayan (Independent Philippine Catholic), 9.8%; Mohammedan, 4.2%; Protestant, 2.3%; others, 5%.

HISTORY. Fernando Magellan, the Portuguese navigator in the service of Spain, discovered the Philippines on March 16, 1521, and 21 years later a Spanish exploration party named the group of islands in honor of Prince Philip, later Philip II of Spain. Spain retained possession of the islands for the next 350 years, although the Moros in the southern islands continued to harass the Spanish troops until 1850.

The Philippines were ceded to the United States in 1899 by the Treaty of Paris after the Spanish-American War. Meanwhile the Filipinos, led by Emilio Aguinaldo, had declared their independence. They continued guerrilla warfare against U. S. troops until the capture of Aguinaldo in March, 1901. By July, 1902, peace was established in all parts of the islands except those inhabited by Moros.

The first U. S. civilian governor-general was William Howard Taft (1901-04). The Jones Law (1916) provided for the establishment of a Philippine legislature composed of an elective Senate and House of Representatives. The Tydings-McDuffie Act (1934) provided for complete Philippine independence in 1946. Under a constitution approved by the people of the Philippines May 14, 1935, the Commonwealth of the Philippines was inaugurated on Nov. 15 under the presidency of Manuel Quezon y Molina, who was re-elected in 1941.

The Philippines were invaded by Japanese troops on Dec. 8, 1941 (Philippine time), and after the fall of Bataan and Corregidor, President Quezon and his government fled to Washington. The Japanese-sponsored "Philippine Republic" received little support from most Filipinos. U. S. forces led by Gen. Douglas MacArthur reinvaded the islands in Oct., 1944, and after the liberation of Manila (Feb., 1945), Sergio Osmeña, who had succeeded to the presidency on the death of Quezon (Aug. 1, 1944), re-established his government in the Philippines.

Brig. Gen. Manuel A. Roxas y Acuña, who defeated Osmeña in the elections of April, 1946, became first head of the new independent republic, which came into existence on July 4, 1946, as scheduled in the Tydings-McDuffie Act. He died April 15, 1948, and was succeeded by the Vice President, Elpidio Quirino, who pledged continuation of Roxas' domestic program and pro-U. S. foreign policy. He was re-elected on Nov. 8, 1949.

GOVERNMENT AND DEFENSE. Under the constitution of 1935 (as amended in 1940), the Philippines have a republican form of government based on that of the United States. Executive power is exercised by the president, popularly elected for a 4-year term and assisted by a cabinet appointed by him. The popularly elected Congress has two houses—the Senate with 24 members and the House of Representatives with 98 members.

The Philippine army has been reorganized and re-equipped with U. S. assistance. An agreement signed March 14, 1947, provided for the establishment, for a 99-year period, of 23 U. S. military, naval and air bases in the islands.

EDUCATION. In the calendar year 1947,

an estimated 3,085,302 pupils were enrolled in public schools, 267,473 in private. Tagalog is the national language but English and Spanish are used throughout the country.

AGRICULTURE AND INDUSTRY. Agriculture is the chief industry. Average size of the farms is 10 acres, but there are many large plantations. Rice (palay) is the staple native food cereal, but production (2,491,290 metric tons in 1949) is insufficient to meet home consumption. The Philippines normally produce about half the world copra supply and a large proportion of the abacá (Manila hemp) supply; they are also a leading source of sugar (1948-49: 692,910 metric tons) and sugar products, normally the chief export. Other crops include sisal, kapok, cotton, corn, tobacco, coffee, rubber, cacao, citrus fruits and bananas. In the crop year 1948-49, 698,120 tons of copra, 21,920 tons of tobacco and 74,510 tons of abacá were produced. Livestock in 1949 included 1,818,530 carabaos, the farmers' all-purpose animal; 657,730 cattle; 195,280 horses; and 3,532,770 hogs.

Some subsistence crops have reached prewar production levels. Export crops necessary to economic recovery, however, have made slow progress, except for copra.

Industry had made some progress prior to World War II, but private manufactures were still in their infancy. Industrial establishments suffered serious damage as a result of the war. A start has been made in sugar, rope, cigar, cigarette and furniture factories, lumber and rice mills, and modern factories producing beverages, perfumes, cosmetics and other consumer's goods. Preparation of fine embroideries is an important home industry.

FOREIGN TRADE. Statistics of trade, in millions of pesos, are as follows:

	1947	1948	1949
Exports	531	638	512
Imports	1,023*	1,136*	1,134*

* Excluding surplus property and relief shipments.

In 1949, the chief exports were copra (35%), sugar (17%), abacá (11%), desiccated coconut (8%) and coconut oil (7%). Leading imports were cotton and manufactures (11%), rayon, grain and iron and steel and manufactures. The U. S. supplied 74 per cent of the imports and took 79 per cent of the exports.

FINANCE. The 1950-51 budget, as modified, estimated expenditure (ordinary and extraordinary) at 365,448,258 pesos and revenue at 390,209,400 pesos.

Chief sources of revenue are excise taxes and the business occupation taxes. The total bonded indebtedness on Mar. 31, 1948, was 33,938,051 pesos. In Apr., 1946, the U. S. Congress appropriated \$520,000,000 for the rehabilitation of the Philippines.

COMMUNICATION. Transportation facilities suffered especially severe damage during World War II. The inter-island trade—extremely important because of the makeup of the archipelago—is served by vessels licensed for domestic, coastwise and bay and river traffic. The port of Manila has ample facilities for ocean-going vessels. Railway mileage (1949) totaled 613, most of which (540 mi.) was on Luzon. Highways totaled 14,933 miles in 1946. Air transportation has assumed an important place in inter-island communication.

MINERALS, FORESTS AND FISHERIES. The Philippines possess large but relatively undeveloped mineral resources. Most important are gold, silver, iron ore, copper ore, chromite, manganese ore, lead and zinc. Petroleum formations are also known to exist. In 1949, 287,844 ounces of gold, 218,419 ounces of silver, 7,007 metric tons of copper concentrates, 165,340 tons of chromite (refractory), 81,404 tons of chromite (metallurgical) and 123,336 tons of coal were mined.

The forest area is estimated at more than 43,700,000 acres (about 58 per cent of the total area), not including 3,200,000 acres covered with cogón grass, fit for grazing. About 97.5 per cent of the total forest area is government-owned. Lumber production totaled 493,000,000 bd. ft. in 1949.

Of the approximately 1,900 different species of fish, only about 100 kinds are marketed, although a majority are edible. Fish exports are chiefly canned tunas.

TOPOGRAPHY. The Philippines are an archipelago of approximately 7,083 islands lying about 500 miles off the southeast coast of Asia and bounded on the west and north by the South China Sea, on the east by the Pacific, and on the south by the Celebes Sea. They extend north and south about 1,152 miles and east and west about 688 miles. The northernmost island, Y'Ami, is 65 miles from Formosa, while the southernmost, Saluag, is 30 miles east of Borneo. Only 466 of the islands have an area of more than one square mile, and only 2,441 have names. The largest islands are Luzon in the north (40,814 sq. mi.), Mindanao in the south (36,906 sq. mi.), Samar (5,124 sq. mi.), Negros (4,903 sq. mi.), and Palawan (4,500 sq. mi.). The islands are the tops of an irregular, submerged mountain chain which is largely of volcanic origin. The plains lying amid the mountains are the most densely populated portions of the islands, except in Cebu, where the people live mostly on the coastal plain. Extensive drainage systems are provided by the numerous short rivers.

CLIMATE. The temperature is warm throughout the year, averaging 80°, with only slight variations. Rainfall averages

about 90-100 inches annually, with the wettest season occurring from June or July through October. Typhoons, often causing severe damage, originate in the Pacific and strike the islands from the east and southeast before curving north.

Poland (Republic)

(Rzeczpospolita Polska)

Area: 119,703 square miles.

Population (est. 1948): 25,225,000.

Density per square mile: 210.8.

President: Boleslaw Bierut.

Premier: Joseph Cyrankiewicz.

Principal cities (est. 1948): Warsaw, 586,000 (capital); Łódź, 576,000 (industrial center); Kraków, 301,000 (trading center); Wrocław (Breslau), 299,000 (former German industrial center); Poznań, 297,000 (farm products).

Monetary unit: Zloty.

Language: Polish (more than 90%).

Religions: Roman Catholic, Jewish, Protestant.

HISTORY. A victim of aggression and partition throughout the ages, Poland found history repeating itself in World War II. Her area was reduced from that of California to that of New Mexico, and her population was cut by 11,000,000. Her people reeled from the combined effects of the cruel German occupation, a severe famine and general postwar instability. Her postwar government was in the hands of a small Communist minority which allowed little democratic opposition. Economic reconstruction has continued at a steady pace, but externally Poland remains subservient to the U.S.S.R.

Little of certainty is known about Polish history prior to the end of the 10th century. Early in the 11th century the Polish king, Boleslaus I (the Brave), ruled over Bohemia, Saxony and Moravia. Mongol invasions in 1241 and 1259 were repelled with accompanying devastation. Meanwhile, the Teutonic Knights were erecting in Prussia a state which included part of Poland and barred the latter's access to the Baltic. The Knights were defeated by Wladislaus II (1386-1434) at Tannenberg in 1410 and became Polish vassals under the Peace of Thorn (1466), by which Poland regained a Baltic shoreline.

Poland reached the peak of its power between the 14th and 16th centuries. The 16th century was marked by a constant growth of power on the part of the lesser nobility with a corresponding weakening of the Crown, which became elective in 1572. In succeeding years, Poles scored many military successes against the Russians and Turks. In 1683, King John Sobieski, a famous military leader, turned back the Turkish tide near Vienna.

These successes did not halt the process of decline which resulted from the lack of strong central authority, and Prussia, Russia and Austria were able to carry out a first partition of the country in 1772, a second in 1792 and a third in 1795-96. For more than a century thereafter, there was no Polish state, but the Poles never ceased their efforts to regain their independence. World War I found them fighting unhappily on both sides.

The independence of Poland was formally proclaimed in Nov., 1918, and Marshal Josef Pilsudski was confirmed in office as President. In 1919, Ignace Paderewski, famous pianist and patriot, became the first premier. Russia attacked Poland in 1920 but the Poles, under Marshal Pilsudski and aided by the French, defeated the invaders. On May 12, 1926, Marshal Pilsudski seized complete power in a coup d'état and ruled the country dictatorially until his death on May 12, 1935, when he was succeeded by Marshal Edward Smigly-Rydz.

Despite a 10-year non-aggression pact signed with Germany in 1934, Hitler attacked Poland on Sept. 1, 1939. Russian troops invaded from the east Sept. 17, 1939, and on Sept. 28 a German-Russian agreement was signed dividing Poland between Russia and Germany. Before leaving Poland, President Ignacy Moscicki resigned, designating as his successor W. Raczekiewicz; the latter formed a government-in-exile in France with Gen. Wladyslaw Sikorski as premier; this government moved to London after France's defeat in 1940. All of Poland was occupied by Germany after the Nazi attack on the Soviet Union in June, 1941. On July 30, 1941, Poland concluded an agreement with the U.S.S.R. voiding all German-Soviet agreements effected after Sept. 1, 1939.

The legal Polish government soon fell out with the Russians, however, and in July, 1944, a Communist-dominated Polish Committee of National Liberation received Soviet recognition. Moving to Lublin after that city's liberation, it proclaimed itself the Provisional Government of Poland on Dec. 31, 1944. After almost six months' negotiations, some of the former members of the Polish Government in London joined with the Lublin government to form the Polish Government of National Unity on June 28, 1945. Great Britain and the U. S. recognized this government on July 5, 1945, and withdrew recognition from the London government.

Democratic participation was negligible in the new government, which had adhered strictly to Soviet foreign policy and pursued a program of internal socialization. The government bloc controlled by the small Communist minority won a sweeping victory in the Jan., 1947, elections, which

gave little opportunity to the opposition for campaigning or voting.

On Aug. 2, 1945, in Berlin, Prime Minister Attlee, President Truman and Generalissimo Stalin established a new *de facto* western frontier for Poland, along the rivers Oder and Lausitzer Neisse, pending the final peace treaty. On Aug. 16 the Soviet Union and Poland signed a treaty delimiting the Soviet-Polish frontier. Under these agreements Poland was shifted westward. In the east it lost 69,860 square miles with 10,772,000 inhabitants; in the west it gained (subject to final peace conference approval) 38,986 square miles with a pre-war population of 8,621,000. By 1948 all Germans in the latter area had been expelled and replaced with Poles who lived formerly in the territory ceded to the U.S.S.R., or in Germany or other countries.

GOVERNMENT AND DEFENSE. Poland is a republic headed by a president chosen for a seven-year term by the Parliament, which consists of 442 members popularly elected for a seven-year term. The administration of the government is carried on by a council of ministers headed by the premier.

The Interim Constitution approved by Parliament on Feb. 20, 1947, provides for a 5-member State Council with far-reaching powers and gives the cabinet wide powers when Parliament is not in session.

Poland's army in 1949 numbered about 250,000 men, organized and equipped along Soviet lines with Soviet assistance. The air force had 400 planes. Unknown numbers of security troops organized in paramilitary formations maintain internal order under the direction of the Interior Ministry. In 1950 the navy had 2 destroyers, 4 submarines and some minesweepers and coastal craft.

SOCIAL AND ECONOMIC CONDITIONS. In the school year 1948-49 there were 22,131 primary schools with 3,241,046 pupils. Secondary schools numbered 844 with 338,003 pupils. The three pre-1939 state universities of Warsaw, Kraków and Poznan, and the private (Catholic) university of Lublin re-opened in the fall of 1945. New universities have been founded at Lublin, Gdansk (Danzig), Wrocław (Breslau), Torun and Łódź. Students enrolled in 40 universities and other schools of higher learning numbered 92,444 in 1949. Education is free and compulsory up to 18.

Poland remains essentially an agricultural country: the areas now under *de facto* Polish administration in the west accounted for 25 per cent of Germany's pre-war food production. About 70 per cent of postwar Poland is arable land. Much of it has been divided into small farms under the land reform program. Before World War II, Poland exported large quantities of farm products. Farm lands lost to the

Soviet Union were considerably larger in area than those gained from Germany; as a result, recent harvests have barely met domestic needs, even though the population has been reduced 30 per cent.

Agricultural production figures in 1949, in metric tons, included wheat, 1,780,900; rye, 6,759,300; barley, 1,027,800; potatoes, 30,900,600; sugar beets, 5,140,000. The estimated livestock population is still somewhat depleted. On June 30, 1949, there were 2,538,200 horses, 6,365,100 cattle, 5,836,700 hogs and 1,621,200 sheep.

Poland's industrial facilities, although severely damaged during World War II, were not greatly affected by territorial concessions to the U.S.S.R., with the exception of the Lwów area. On the other hand, important German industrial areas, especially Silesia and the city of Stettin, are located in the territories under *de facto* Polish administration. As a result, postwar Poland has a much larger industrial potential. Almost all industries have been nationalized or placed under state control, and a planned economy has been introduced as part of the government's drive to make Poland an industrial nation. Under the impetus of a three-year program of economic reconstruction initiated in 1947, the rehabilitation of Polish industry has been relatively rapid. That program was completed ahead of schedule in 1949, and a new six-year program was launched in 1950. Raw steel production amounted to 2,303,000 metric tons in 1949.

Foreign trade is largely conducted by government organizations under the terms of numerous trade agreements with other nations. Statistics, in millions of U. S. dollars, are as follows:

	1947	1948	1949
Exports	245*	534*	679
Imports	453†	519	633

* Excluding special coal shipments to the U.S.S.R. valued at \$60,000,000 in each year.

† Including relief, war surplus and reparations shipments valued at \$153,000,000.

In 1948 the Soviet Union supplied 23 per cent of imports, followed by Britain (8%), the U. S. (6%) and Germany (6%). The Soviet Union took 21 per cent of exports, followed by Sweden (13%), Britain (8%) and Germany (8%).

Main exports in 1946 were coal and coke (59.7%), textiles and clothing (14.3%), iron and steel (4.8%) and sugar (4.4%); the leading imports were grains (26.8%), cotton, wool and flax (13.4%), petroleum products (12.7%) and iron ore (4.5%). In the prewar years 1936-39 the Soviet Union supplied only 1.1 per cent of the imports and took 0.4 per cent of the exports.

The 1950 budget estimated revenue at 848,025,715,000 zlotys and expenditure at 848,015,596,000 zlotys. The budget includes

revenue and expenditure of some government enterprises.

The public debt on Oct. 1, 1947 (prewar debt excluded) was 29,400,000,000 zlotys. The official exchange rate of the zloty—100 to the U. S. dollar—does not reflect the actual relative purchasing power of the two currencies, and most trade transactions are at the rate of 400 zlotys to the dollar.

In May, 1949, the Polish merchant marine numbered 46 ships of 164,989 gross tons. The principal Polish ports, all severely damaged, are Gdynia, with one of the largest harbors in Europe, Gdansk (Danzig) and the former German port of Stettin. Transportation facilities and rolling stock suffered heavy damage during World War II—a factor still hampering Poland's economic recovery. There are about 61,000 miles of public highway, 4,800 miles of inland waterways and 15,500 miles of railway.

The acquisition of large coal deposits in German Silesia (estimated at more than 5,000,000,000 tons), combined with much larger reserves in the southwestern region, makes Poland one of the world's leading coal producers. The 1949 output was 74,081,000 metric tons, a third of which was produced in former German territory. Iron ore deposits are located in the Kielce and Radom districts and in German Silesia. Production in 1948 was 650,000 tons. Zinc and lead ores are located chiefly in Upper Silesia and the voivodships of Kielce and Kraków. Prewar Poland's principal oil-producing areas, Boryslaw-Drohobycz, are in the territory ceded to the Soviet Union; 1948 production was 1,000,000 barrels (about 25% of prewar). Among other deposits, Poland possesses copper, sulfur, chalk, clay, kaolin, marble and granite.

Forests cover 23 per cent of the land, but important wood resources are located in the territory ceded to the Soviet Union, and current production supplies less than half the annual need.

TOPOGRAPHY AND CLIMATE. Most of Poland is a plain with no natural boundaries except the Carpathian Mountains on the south and the Oder and Neisse Rivers on the west. Pomerania is traversed by a range of low hills, while south of Gdansk is a maze of marshes, sand dunes and muddy lakes which extend into Polish East Prussia (Mazuria). The central Polish plain, 300 to 450 feet above sea level and intersected by great rivers, lies south of the flat country along the Baltic shore. Southern Poland and Silesia are hilly regions, while on the right bank of the Vistula is the plateau of Lublin.

Poland's climate is dependent upon her proximity to the Baltic and to the Carpathian Mountains. Abundant rainfall

(annual average: 22.8 in.) is caused by the predominating western oceanic winds. Snowfall is not heavy, but temperatures below zero are not uncommon, and the rivers are generally icebound for two and a half to three months each year.

Portugal (Republic) (República Portuguesa)

Area: 35,413 square miles.

Population (est. June 30, 1949): 8,491,000 (practically all Portuguese).

Density per square mile: 239.8.

President: António Oscar de Fragoso Carmona.

Premier: António de Oliveira Salazar.

Principal cities (census 1940): Lisbon (Lisboa), 1948: 796,227 (capital, seaport); Oporto (Porto), 262,309 (seaport, port wine); Funchal (in Madeira Islands), 54,856 (Madeira wine); Coimbra, 35,437 (university); Setúbal, 35,071 (seaport, sardines).

Monetary unit: Escudo.

Language: Portuguese.

Religion: Roman Catholic.

HISTORY. Rolling and rugged Portugal is about the size of Indiana and, thanks to the days when its sailors and explorers were among the world's most venturesome, has a colonial empire 23 times the area of the homeland. A traditional ally of Britain, Portugal remained neutral in World War II but gave the Allies the right to use vital island bases in the Atlantic. Politically, Portugal is a virtual dictatorship; opposition is officially suppressed, and many phases of the national life are strictly regimented.

Portugal was part of Spain until it won independence in 1143 with Alfonso I as the first king. During the long reign of King John I (1385-1433), a great commercial empire was built, largely through the exploratory hobby of the king's son, Prince Henry the Navigator. Bartholomeu Diaz explored Africa's west coast and reached the Cape of Good Hope in 1488. Vasco da Gama rounded the Cape and discovered the water route to India in 1497-99. Portugal's empire reached its crest about 1540, when it embraced the coast of Brazil, east and west Africa, Malabar, Ceylon, Persia, Indo-China and Malaya.

In 1580-81 Spain and Portugal were joined in a personal union under Philip II of Spain. Portugal revolted in 1640 and set up a new dynasty under John IV, Duke of Braganza, but the country never recovered its position as one of Europe's major powers. In 1806, when Portugal refused to obey Napoleon's orders that all continental ports be closed to British ships, French forces invaded the country but were ousted in 1811 by British and Portuguese forces under the Duke of Well-

ington. The royal family had fled to Brazil in 1807 but following an uprising at home, the king, John VI, returned in 1821.

Brazil declared its independence in 1822 and John's son, Pedro, became emperor of the new state as Pedro I. In 1832, Pedro I, who had abdicated as emperor of Brazil in 1831, returned to Europe and led an uprising with British assistance in favor of his daughter, Maria II, displacing his younger brother, Miguel I, who had been proclaimed king in 1828. The descendants of Maria's marriage with Ferdinand of Saxe-Coburg ruled Portugal until 1910, when King Manoel II was forced into exile by a republican revolt.

On June 19, 1911, the monarchy was abolished, and a republican constitution was introduced. Portugal proclaimed its loyalty to the British alliance upon the outbreak of World War I, and Portuguese troops fought both in Africa and on the Western Front. There was much internal political instability during and immediately after the war.

On May 30, 1926, a revolution led by the army deposed the president and set up a military dictatorship. General António Oscar de Fragoso Carmona became premier and acting president Nov. 29, 1926, and was elected president on March 25, 1928. Dr. António de Oliveira Salazar, who was appointed finance minister in 1928, founded the organization known as the National Union in 1930 and has been premier and dictator since 1932. His regime, while admittedly opposed to liberal or democratic principles, has brought political and economic stability to Portugal. President Carmona was re-elected in 1935, 1942 and 1949. General elections for members of the National Assembly held on Nov. 18, 1945, and on Nov. 13, 1949, were boycotted by the opposition, and the National Union was continued in office. Portugal adhered to the North Atlantic Pact in April, 1949.

GOVERNMENT AND DEFENSE. Under the constitution of 1933 Portugal is a corporative republic. The president is popularly elected for a term of 7 years; the National Assembly of 120 members for a term of 4 years. There is also a corporative chamber which handles economic, social and some legislative matters; its 105 members are representatives of local autarchies and of the several branches of social activities—administrative, moral, cultural and economic. The Assembly theoretically may overrule the president's veto by two-thirds vote. The president appoints the premier, who in turn selects the cabinet; the latter is not responsible to the National Assembly.

Military service is compulsory; the initial training period is 6 years, but not all those liable for duty are called up. The army numbered about 61,000 in 1949 (in-

cluding the Portuguese Legion, a volunteer force); the air force had 575 planes in 1947. The navy in 1950 had 5 destroyers, 6 submarines, 8 sloops and several smaller craft. Naval personnel numbers about 6,000.

SOCIAL AND ECONOMIC CONDITIONS. Compulsory education was introduced in 1911. Elementary schools in 1946-47 numbered 10,248 with 533,344 students. Secondary schools numbered 43 with 20,965 pupils. Private elementary schools were attended by 59,698 pupils and private secondary schools by 24,800. There were four universities (Coimbra, Lisbon [2], Oporto) with 8,500 students.

Portugal's corporate state has a planned economy in which each producing unit regulates itself in the interest of the nation. Corporate units have been established in agriculture, industry and finance. As an example, the government controls the wine trade by means of a federation of growers and a guild of exporters.

Sixty per cent of Portugal's people are engaged in agriculture. Although wheat is the leading crop, it is insufficient to meet domestic needs, and grain must be imported. One of the world's leading wine-makers, Portugal produces two famous kinds—Port in the vicinity of Oporto, and Madeira in the islands of the same name. In olive oil production, Portugal usually ranks third in the world (production 1949: 88,000 metric tons).

Leading crops in 1949, in metric tons, were wheat, 411,000; barley, 101,000; oats, 109,000; corn, 218,000; and potatoes (1948), 994,000. Wine production in 1949 was about 191,400,000 U. S. gallons (1939-48 average: 241,000,000 gallons).

The livestock inventory in 1944 showed 3,889,875 sheep, 1,176,888 hogs, 80,675 horses, 1,196,232 goats and 6,161,065 poultry. Wool production in 1949 was approximately 8,000 metric tons.

Portuguese manufacturing is largely limited to consumer's goods for domestic consumption. Besides the production of porcelain tiles, it includes a sizable textile industry in cotton, wool, silk and linen.

Trade statistics, in millions of escudos:

	1947	1948	1949
Exports	4,307	4,295	4,064
Imports	9,462	10,351	9,042

In 1949, the principal customers were the Portuguese colonies (26%), Britain (19%) and the U. S. (10%); the chief suppliers were Britain (24%), the U. S. (18%) and the Portuguese colonies (13%). Chief exports were textiles (16%), cork (16%), wine (14%) and fish, mainly sardines (10%). Leading imports included wheat and flour, ships, industrial machinery, raw cotton and iron and steel.

On June 30, 1948, the merchant marine had 320 vessels (100 tons and over) of 471,438 gross tons. Railway mileage in 1949 was 2,240, and highway mileage (1947), 16,080. Portugal is an important international air center.

Recent financial data are as follows (in millions of escudos):

	1948*	1949*	1950*
Revenue	5,551	5,667	5,272
Expenditure	5,549	5,666	5,268

* Budget estimate.

The net public debt (Dec., 1947) was 9,069,553,000 escudos.

Mineral resources have not been fully developed, but wolfram, coal, iron ore, copper, manganese, iron pyrites, lead, tin, and other ores are found. The coal output in 1949 was 554,881 metric tons, iron pyrites (1948) 556,135 tons, wolfram (1948) 2,511 tons, and lead (1948) 1,650 tons. Uranium deposits have been reported.

Portugal is one of the world's leading producers of cork; production in 1948 was 140,442 tons. The production of resin (1947: 53,543 metric tons) and of turpentine (41,561 tons) is also important.

The fishing industry is a basic part of the national economy, employing about 43,000 men and 15,300 boats in 1947. Of special importance is the sardine industry centered at Setúbal, south of Lisbon. The total fishery catch in 1948 was 180,606 metric tons valued at 669,000,000 escudos.

TOPOGRAPHY AND CLIMATE. Portugal occupies a rectangular area about 360 miles long and 140 miles wide in the southwestern part of the Iberian Peninsula. It is crossed by many small rivers, and also by three large ones which rise in Spain, flow into the Atlantic, and divide the country into three geographic areas. The Minho (Miño in Spain) River, part of the northern boundary, cuts through a mountainous area that extends south to the vicinity of the Douro (Duero) River. South of the Douro the mountains slope to the plains about the Tagus (Tejo) River. The remaining division is the southern one of Alentejo.

The Azores, stretching over a distance of 400 miles in the Atlantic, consist of 9 islands divided into three groups, with total area of 888 square miles. The nearest continental land is Cape da Roca, Portugal, which lies 800 miles to the east. The Azores are an important station on Atlantic air routes, and both Britain and the United States established air bases there during World War II. Madeira, consisting of two inhabited islands, Madeira and Porto Santo, and two groups of uninhabited islands, lies in the Atlantic about 535 miles southwest of Lisbon. Total area of the Madeiras is 314 square miles.

Portugal's climate is equable and temperate, but in the deep valleys where the mountains keep out the cool winds from the Atlantic, it is excessively hot in summer. Lisbon, Coimbra and Oporto all have mean temperatures of 60° to 61.5°. Heavy fogs are common along the coast. Rainfall has been as great as 16 feet a year. It is heaviest in the north and on the Serra da Estrela.

PORTUGUESE COLONIAL EMPIRE

	Area, sq. ml.	Population, est. 1948
AFRICA		
Angola (Portuguese West Africa)	487,788	4,595,000
Cape Verde Islands	1,539	161,000
Mozambique (Portuguese East Africa)	297,654	6,258,000
Portuguese Guinea	13,944	431,000
São Tomé and Príncipe Islands	872	57,000
ASIA		
Macao	5	389,000
Portuguese India	1,538	667,000
Timor	7,330	440,000

The status of the Portuguese overseas colonies is fixed by the Colonial Act of July, 1930, included in the constitution approved March 19, 1933. Each colony has a governor or governor general, appointed by the council of ministers for an initial 4-year term and responsible to the minister for the colonies at Lisbon. Each colony has financial and administrative autonomy.

ANGOLA (Portuguese West Africa)— Status: Colony.

Capital: Loanda (population 77,130).

Governor General: José Agapito da Silva Carvalho.

Foreign trade (1949): exports, 1,793,012,000 escudos; imports, 1,337,024,000 escudos. Chief exports: coffee (30%), diamonds.

Agricultural products (1949): sugar, 42,601 metric tons; cotton, 20,267 tons; sisal, 19,883 tons; coffee (exports), 46,379 tons; corn; palm kernels and oil; peanuts; rice.

Minerals: diamonds (1949: 769,981 carats), lignite, copper.

Forest products: beeswax, timber.

Industries: sugar, palm oil, whale oil, fish oil.

Angola stretches along the west African coast for about 1,000 miles from Belgian Congo to the Cunene River. Outside of a coastal plain varying in width from 30 to 100 miles, the colony is part of the great African plateau. The Angola coast and the Congo River were explored by the Portuguese in 1482-85, and Loanda was founded in 1576. Agreements concluded with the Congo Free State, Germany and France in 1885-86 (later modified in details) fixed the limits of the province except in the southeast, where the frontier was deter-

mined by the Anglo-Portuguese agreement of 1891 and the arbitration award of the King of Italy in 1905. The governor general is assisted by a council of 10 (5 officials and 5 Portuguese nationals). There are 5 provinces.

Angola is primarily an agricultural country. Its varied altitude enables it to produce both tropical and temperate crops. Excellent grazing land exists in many parts of the colony, and there are more than 1,000,000 cattle. Railways total 1,477 miles, and primary roads 21,949 miles. The chief ports are Loanda and Lobito. The great majority of the population are of Bantu-Negro stock, mixed in the Congo district with the pure Negro. Europeans in 1947 numbered 56,000, and half-castes 30,500.

Mean annual temperature at Loanda is 74.3°; the cool season lasts from June to September, the wet from October to May.

CAPE VERDE ISLANDS—Status: Colony. Capital: Praia (population 6,188).

Governor: Carlos Alberto Garcia Alves Roçadas.

Foreign trade (1947): exports, 205,896,344 escudos; imports, 223,432,439 escudos. Chief exports: salt (7,464 tons), preserved fish.

Agricultural products: coffee, millet, castor oil, oranges, hides.

This group of 14 volcanic islands lying off the west African coast was discovered in 1456 by the Venetian captain Alvise Cadamosto, in the service of Prince Henry the Navigator. The island of São Vicente is an important coaling station on the South American route. The vast majority of the inhabitants are mulattoes (101,284 in 1943) and Negroes (51,070)—descendants of slaves brought to the islands from Africa by early settlers. Public slavery was abolished in 1854, and private slavery in 1876. Europeans in 1940 numbered 5,580.

Summer temperatures are high in the archipelago, ranging up to 90° near the sea. The rainy season lasts from August to October.

MOZAMBIQUE (Portuguese East Africa)

—Status: Colony.

Capital: Lourenço Marques (population 63,223).

Governor General: Gabriel Maurício Teixeira.

Foreign trade (1949): exports, 1,176,336,265 escudos; imports, 1,877,806,838 escudos. Chief exports: cotton (21%), copra (14%), sisal, sugar.

Agricultural products (1948): cotton (unginned), 21,079 metric tons; sugar cane, 72,776 tons; sisal, 16,330 tons; vegetable oils; copra; cashew nuts.

Minerals: gold (1948: 5,602 oz.), coal, graphite, mica.

Forest products: mangrove bark, timber.

Mozambique, stretching for about 1,430 miles along Africa's southeast coast, was

discovered by Vasco da Gama in 1498, although the Arabs had penetrated into the area as early as the 10th century A.D. It was first colonized in 1505, and by 1510 the Portuguese were masters of all the former Arab sultanates on the east African coast. The boundaries with British Central and South Africa were delimited in 1891, and with Tanganyika Territory in 1886 and 1890. By the Treaty of Versailles, following World War I, Portugal was allotted the Kionga triangle, formerly part of German East Africa. One of the four provinces—Manica and Sofala (87,454 sq. mi.)—was held by the Mozambique Company until 1942, when the Portuguese Government refused to renew its charter.

Agriculture is the chief industry. There are many large plantations, some of which are partially mechanized. Stockraising is hampered by prevalence of the tsetse fly.

Ninety-nine per cent of the inhabitants are native Africans of the Bantu Tribes. In 1945 there were 31,191 Europeans and 11,365 Asiatics. There are 1,349 miles of railway and 16,687 miles of road, mostly unimproved. The chief ports are Lourenço Marques and Beira, which is also the port for Rhodesia. The principal river, the Zambezi, divides the colony in half.

The cool season lasts from April to August, and the rainy season from December to March. On the central coast the mean annual temperature is about 85°.

PORTUGUESE GUINEA—Status: Colony. Capital: Bissau (population 3,362).

Governor: Raimundo António Rodrigues Serrão.

Foreign trade (1947): exports, 124,698,700 escudos; imports, 154,036,540 escudos. Chief exports (in tons): peanuts (38,861), palm oil.

Agricultural products: peanuts, palm kernels, hides, rice.

Forest products: wax, timber.

This colony, lying on the west African coast and almost surrounded by French West Africa, was discovered in 1446 by the Portuguese Nuno Tristão and was separated from the colony of the Cape Verde Islands in 1879. It consists of a low-lying coastal region and 60 islands off the coast. The country is undeveloped economically, and most of the natives are farmers. There are no railways, but navigable rivers totaling over 1,000 miles are important trade arteries; there are also about 1,650 miles of roads. About two-fifths of the natives are Moslem; there were 1,419 Europeans in 1940. On the coast, temperature varies between 77° in January and 85° in May. The dry season lasts from December to May.

SÃO TOMÉ AND PRÍNCIPE—Status: Colony.

Capital: São Tomé.

Governor: Carlos de Sousa Gorgulho.

Foreign trade (1947): exports, 222,393,000

escudos; imports, 79,949,000 escudos. Chief exports: cacao, coffee, copra.

Agricultural products: cacao, coffee, coconuts, copra, palm oil.

These volcanic islands, lying in the Gulf of Guinea about 150-175 miles off the west African coast, were discovered by the Portuguese in 1471. Most of the early inhabitants were convicts and Jews from Portugal and slaves from Brazil and the mainland, but the bulk of the present inhabitants are Negro contract laborers from the mainland and Cape Verde engaged to work cacao plantations.

MACAO—Status: Colony.

Capital: Macao (population 148,456).

Governor: Albano Rodrigues de Oliveira.

Chief exports: fish, cement, preserves.

Manufactures: cement, preserves, fire-crackers, vegetable oils, metal products.

Macao comprises the peninsula of Macao and the two small islands of Taipa and Colôane on the south China coast, about 35 miles from Hong Kong. Established by the Portuguese in 1557, it is the oldest European outpost in the China trade, but Portugal's sovereign rights to the port were not recognized by China until 1887, and its boundaries are still not delimited. The port has been eclipsed in importance by Hong Kong, but it is still a busy distribution center, and also has an important fishing industry employing over 40,000 people. It is notorious for its opium trade and gambling houses. Portuguese number about 4,000.

PORTUGUESE INDIA—Status: Metropolitan province.

Capital: Panjim (Nova Gôa) (population 12,000).

Governor General: Fernando Quintanilha de Mendonça Dias.

Foreign trade (1946): exports, 48,743,000 escudos; imports, 225,881,000 escudos.

Chief exports: fish, spices, copra.

Agricultural products: cashew nuts, coconuts, spices.

Minerals: manganese, salt.

The colony consists of Gôa and 3 islands on the Malabar coast of India; Damão and the territories of Dadará and Nagar-Aveli, on the Gulf of Cambay; and Diu, with the continental territories of Gocola and Simbor, on the coast of Gujarat. Gôa, captured in 1510 by the Portuguese, later became capital of the whole Portuguese empire in the east. The native population is largely Hindu.

TIMOR—Status: Colony.

Capital: Dili (population 7,000).

Governor: Cesar Maria de Serpa Rosa.

Foreign trade (1947): exports, 5,175,000 escudos; imports, 27,480,000 escudos. Chief exports: coffee, sandalwood, wax, copra.

Agricultural product: coffee (exports 1947: 2,100 short tons).

Forest products: sandalwood, wax.

Portuguese Timor consists of the eastern half of the island of Timor in the Malay Archipelago, with the territory of Ambeno and two neighboring islands. It was first settled by the Portuguese early in the 16th century. In 1859 the island was divided between Portugal and the Netherlands; later boundary adjustments were made in 1904. Fishing and copra manufacture are important; trade is mostly in the hands of Chinese, Malaysians and Arabs. The colony was occupied by Dutch and Australian troops in Dec., 1941, and by the Japanese in Feb., 1942. Both occupations received strong Portuguese protest.

Rumania (Republic)

(Republica Populara Româna)

Area (est.): 91,934 square miles.

Population (census 1948): 15,872,624 (Rumanian, 85.7%; Magyar, 9.4%; German, 2.2%; Jews, 0.9%; others [Turkish, Ruthenian, Bulgarian, Gypsy, Ukrainian] 1.8%).

Density per square mile: 172.7.

Chairman of presidium: Constantin Parhon.

Premier: Petru Groza.

Principal cities (est. 1945): Bucharest, 984,619; census 1948: 1,401,807 (capital); Cluj, 110,956 (Transylvanian industrial center); Jassy, 108,987 (trading center, Moldavia); Timisoara, 108,296 (western commercial center); Ploesti, 105,114 (oil).

Monetary unit: Leu.

Languages: Rumanian, Hungarian, German, Turkish.

Religions (est. 1947): Eastern Orthodox, 81%; Greek Catholic, 9%; Roman Catholic, 7%; others, 3%.

HISTORY. In World War I, Rumania joined the Allies and won enough land at the peace conference to double its size. In World War II, Rumania joined the Axis and lost about half its earlier gains. Its present size is about that of Oregon. Politically, it is dominated by the Soviets.

Most of Rumania was the Roman province of Dacia from about A.D. 100 to 275. From the 6th to the 12th centuries, wave after wave of barbarian conquerors—Vlachs, Bulgars and others—passed over the area. Of the two regions which eventually became Rumania, Walachia was taken by the Turks in 1411, and Moldavia in the 16th century, but both retained semi-autonomy. After the Russo-Turkish War, they went under *de facto* Russian protection in 1774.

The Treaty of Paris following the Crimean War nominally united the two provinces in 1858, and Alexander Guza was elected Prince of Moldavia and Walachia. In 1866 he was forced to abdicate and was succeeded by Prince Carol of Hohenzollern-Sigmaringen. The Treaty of Berlin recognized Rumania's complete independence

in 1878, and in 1881 the principality was elevated to a kingdom. Rumania's spoils from the Second Balkan War in 1913 included the Black Sea province of Dobruja. The following year King Carol I was succeeded by his nephew, Ferdinand. The gains of World War I, making Rumania the largest Balkan state, included Bessarabia, northern Transylvania and Bukovina. The Banat, a Hungarian area, was divided with Yugoslavia.

In 1926 Crown Prince Carol renounced his rights to the throne, and when King Ferdinand died on July 20, 1927, Carol's son, Michael (Mihai) became king under a regency. However, Carol returned from exile in 1930, was crowned King Carol II, and gradually became a powerful political force in the country. On Feb. 10, 1938, he abolished the democratic constitution of 1923. On June 21, 1940, the country was reorganized along fascist lines, and the fascist Iron Guard became the nucleus of the new totalitarian party. On June 27, the Soviet Union occupied Bessarabia and northern Bukovina. By the Axis-dictated Vienna Award of Aug. 30, 1940, two-fifths of Transylvania went to Hungary. On Sept. 4, the king dissolved Parliament and granted the new premier, Ion Antonescu, full power, after which he abdicated and went into exile with his mistress, Magda Lupescu, whom he married in 1947 when she became gravely ill. The first official act of his son, Michael I, was to confirm Antonescu in his status as head of the state and premier. Rumania subsequently signed the Axis Pact on Nov. 23, 1940, and the following June joined in Germany's attack on the U.S.S.R., reoccupying Bessarabia. Following the invasion of Rumania by the Red Army in Aug., 1944, King Michael led a coup d'état which ousted the Antonescu government. The new cabinet, headed by Constantin Sănătescu, included Socialist and Communist representatives. An armistice was signed Sept. 12 in Moscow.

Sănătescu was replaced on Dec. 6, 1944, by Nicolai Rădescu, who in turn yielded on March 6, 1945 to Petru Groza. The latter formed a cabinet made up of members of the National Democratic Front (NDF), a political group formed by Communists, Social Democrats and subsidiary parties. Two opposition members were added to the cabinet Jan. 7, 1946, as one result of the Moscow Conference of Foreign Ministers, and on Feb. 5 the U. S. and Britain recognized Rumania conditional upon the holding of free elections. Elections, held Nov. 19, 1946, resulted in a victory for the Communist-dominated government bloc headed by Groza, who was reappointed premier with an all-NDF cabinet on Nov. 29. Rumania was under complete Soviet political and economic domination. King Michael abdicated on Dec. 30, 1947, and

thereafter the nation was declared a "people's republic." Elections held on March 28, 1948, gave 405 of the 414 seats in the National Assembly to the Communist-dominated government bloc.

GOVERNMENT. In 1948 the Grand National Assembly adopted a Soviet-type republican constitution, under which virtually all the powers formerly vested in the king are exercised by a 19-member presidium of the National Assembly. Executive power is vested in the cabinet, and legislative power in the unicameral Assembly.

PEACE TREATY OF 1947. The Paris peace treaty ratified on Sept. 15, 1947, confirmed the *de facto* cession to the Soviet Union of Bessarabia and northern Bukovina, the return to Rumania from Hungary of northern Transylvania (thus annulling the Vienna Award of 1940) and the cession of southern Dobruja to Bulgaria. In addition, Rumania was required to pay reparations in kind in the amount of \$300,000,000 (reduced to \$225,000,000 by the U.S.S.R. in 1948) to the Soviet Union over a period of eight years. She also was to make compensation in lei to the amount of two-thirds of the original value of Allied property damaged or destroyed in Rumania.

The treaty limited the strength of the Rumanian armed forces as follows: army 125,000 men, navy 5,000 men and tonnage of 15,000, air force 8,000 men and 150 planes. The Soviet Union has the right to maintain line-of-communication troops in Rumania until a treaty with Austria becomes effective. The armed forces are being reorganized and re-equipped with Soviet assistance.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory. In 1949 there were 19,000 elementary schools. There are four universities—at Bucharest, Jassy, Cluj and Timisoara. Students in 1949 were 24,000. The state Church, governed by a Holy Synod, is Eastern Orthodox.

Rumania is predominantly agricultural, with about 80 per cent of the population engaged on the soil. In wheat, rye and other grains, it is one of the richest countries of southeastern Europe. In 1947 the largest acreage was devoted to corn (production: 5,279,000 metric tons) and wheat (1,280,000 tons). Other crops are flax, hemp, fruit, vegetables, potatoes, sugar beets, sunflower seeds, tobacco and grapes. Stockraising is also important. In 1947, there were 3,047,964 cattle, 7,084,633 sheep and 1,405,728 hogs. Wool production in 1949 was 14,000 tons.

Agrarian reform measures effected in 1945 provided for the distribution of estates over fifty hectares (123.6 acres) in lots of twelve and one-half hectares to each peasant. Collectivization was not included

in the program, but all cattle and implements became the outright property of the State, for lease to farmers.

Rumania is poorly developed industrially. The chief industries—flour milling, brewing and distilling—are directly connected with agriculture. However, the iron, steel, metal and machinery industries expanded considerably after the initiation of the rearmament program in 1935. In 1947 there were 28,295 industrial establishments which employed 462,305 workers. The most important industries are food processing, textile, metal, chemical, wood and paper. All but the smallest business enterprises have been completely nationalized.

Exports in 1948 totaled 32,175,000,000 lei and imports 30,016,000,000 lei. Principal exports are ordinarily petroleum products, cereals and cereal products, wood and wood products. Leading imports are iron and manufactures, machinery and motors, vegetable fibers and products. Postwar trade has been carried on almost entirely under bilateral trade pacts, mostly with members of the Soviet bloc.

The Danube, flowing along the southern border for more than 200 miles, is a highly important commercial artery. Transshipment between seagoing vessels and river barges is made at Galati and Braila. The Rumanian Sea and River Navigation Company, with one-fourth of its capital furnished by the U.S.S.R. and three-fourths by Rumania, monopolizes river and sea transport. The principle of freedom of navigation on the Danube for all nations was recognized in the 1947 peace treaty but seems unlikely to be implemented. The principal seaport is Constanta.

Railway mileage in 1948 was 7,000; highway mileage in 1945 was 43,163. The Soviet Civil Aviation Company, under Soviet management but financed equally by the U.S.S.R. and Rumania, has the monopoly for all civil air transport inside Rumania and to the Black Sea.

The 1950 budget provided for revenue of 353,880,000,000 lei and expenditure of 350,-680,000,000 lei.

Postwar inflation was severe, and in Aug., 1947, the leu was stabilized at the rate of one new leu to 20,000 old. Stabilization virtually wiped out the internal debt, which amounted to 79,734,000,000 lei on Mar. 31, 1947. The external debt was 45,-228,000,000 lei.

By far the most valuable of Rumania minerals is oil, produced chiefly in the Ploesti region about 35 miles north of Bucharest. In 1939 the output was 45,600,000 barrels, valued at \$45,464,450, about 2 per cent of the total world production. In 1948, production was 34,000,000 barrels.

Natural gas from Transylvania is the second most important mineral, coming to 2,106,000,000 cubic meters in 1947. Other

important minerals are iron ore (1947: about 91,000 tons), lignite (2,108,000 tons), copper ore, gold and silver. The Russo-Rumanian Oil Company controls all former German oil firms and has a monopoly on new exploitation.

Fisheries on the lower Danube and wood production are also important.

TOPOGRAPHY AND CLIMATE. The Carpathian Mountains divide Rumania's upper half from north to south and connect near the center of the country with the Transylvanian Alps, running east and west. North and west of these ranges lies the Transylvanian plateau, and to the south and east are the plains of Moldavia and Walachia. In its last 190 miles, the Danube River flows through Rumania only.

The Moldavian-Walachian region has hot summers and extreme frosts and blizzards in winter. Variations are less extreme in Transylvania and the Banat. Bucharest's average summer temperature is 72°; winter 27°. In some winters the Danube is ice-bound for as long as three months. Rainfall, heaviest in summer, averages 15-20 inches annually.

El Salvador (Republic) (República de El Salvador)

Area: 13,176 square miles.

Population (est. 1948): 2,122,749 (mestizo, 78%; Indian, 11%; white, 11%).

Density per square mile: 161.1.

President: Oscar Osorio.

Principal cities (est. 1948): San Salvador, 132,133 (capital); Santa Ana, 103,651 (coffee, sugar); Nueva San Salvador, 39,409 (trading center).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. El Salvador is the smallest, most densely populated of Central American nations, and the only one without an Atlantic coast line.

Pedro de Alvarado, a lieutenant of Cortez, conquered El Salvador in 1525. The area was administered as part of Guatemala until the general Central American revolution against Spain in 1821. El Salvador struck out as an independent republic in 1839 after the dissolution of the Central American Union. Its story since then has been largely one of revolution and strife.

In Jan., 1931, the first free election in 20 years brought in Arturo Araujo as president. He was overthrown before the year was over. General Maximiliano Hernández Martínez, his successor, remained in power until May, 1944, when a general strike forced his resignation. The next regime, also militarist-led, lasted only five months, and was succeeded March 1, 1945, by a

regime headed by Salvador Castañeda Castro, who was ousted Dec. 15, 1948, by a revolutionary junta. Major Oscar Osorio, one of the junta's members, was named president in the March, 1950, elections.

The constitution provides for a president, popularly elected for four years and normally ineligible to succeed himself; also, a one-house legislature of 42 members. The military forces include an army limited to 3,000, a militia, a national guard and a small air force.

SOCIAL AND ECONOMIC CONDITIONS.

With the second lowest illiteracy rate in Central America, El Salvador provides free and compulsory education; both public and private schools are state-controlled. Primary schools in 1945 numbered 1,519 with about 100,000 students; intermediate schools numbered about 50 with 6,982 students. The national university had 935 students in 1946.

The majority of the population is mixed white and Indian, but the governing class is composed chiefly of the white group of Spanish colonial origin.

El Salvador probably is the most intensely cultivated of Latin American nations, with more than 80 per cent of its land planted. Coffee, which accounts for 85 per cent of total exports (1949 production: 1,700,000 quintals), is controlled in volume by a commission of government officials and planters. Corn, sugar, beans, rice, tobacco, cacao, indigo, millet and sisal fiber are other products. There is some cattle raising and a few local factories, including a monopoly on henequen bags for coffee.

Exports in 1949 totaled \$54,514,610; imports, \$39,477,310. Approximately 75 per cent of the trade is with the U. S.

The two railways have approximately 375 miles of track. All-season highways total 1,436 miles, with an additional 2,300 miles of unimproved roads.

The 1950 budget estimated revenue at \$32,247,111 and expenditure at \$31,111,511. The foreign debt on Dec. 31, 1948, was \$12,943,800.

Gold, silver, coal, copper, iron, zinc, mercury and sulfur are the nation's chief minerals. Gold production in 1949 (27,086 troy oz.) was valued at \$945,076, silver production (280,221 oz.) at \$197,302.

Forest resources, much smaller than in other Central American states, include dyewood, mahogany, cedar and walnut. El Salvador is a leading source of balsam.

TOPOGRAPHY AND CLIMATE. Most of El Salvador is a fertile volcanic plateau about 2,000 feet high. It has several volcanoes, some still active, and many lovely crater lakes. One of these, Lake Ilopango, is a landing place for seaplanes. The moun-

tain ranges along the borders of Guatemala and Honduras give the highlands an almost temperate climate, but the lowlands are often hot and sultry. Temperatures at San Salvador range from about 59° (average daily low) in January to 85° (average daily high) in December; these are the two coolest months. The rainy season lasts from May to October.

San Marino (Republic)

Area: 38 square miles.

Population (est. 1949): 12,418 (mostly Italian).

Density per square mile: 326.8.

Executive: two regents selected every six months by the Grand Council.

Principal town: San Marino (est. pop. 2,000) (capital).

Monetary unit: Lira.

Language: Italian.

Religion: Roman Catholic.

San Marino, the oldest and smallest republic in the world, is one-tenth the size of New York City. It is entirely surrounded by Italy, in the Apennines near Rimini. According to tradition, San Marino was founded about A.D. 350 and had good luck for centuries in staying out of the interminable wars and feuds on the Italian peninsula. The Pope recognized its independence in 1631.

San Marino hires its police and judges from Italy. It no longer confers titles for a consideration, but it does derive much revenue from the exporting of its postage stamps, which are changed often to keep philatelists buying. Other exports are barley, wine and cattle, as well as building stone from Mount Titano.

Executive power is exercised by regents, two of whom are appointed every six months from the popularly-elected Grand Council. There are several primary schools and a high school.

San Marino is linked with Rimini on the Adriatic by a 20-mile electric railway.

Siam. See Thailand

Spain (Nominal Monarchy)

(España)

Area: 194,945 square miles.

Population (est. 1949): 28,154,645 (Spanish, Basque, Catalan).

Density per square mile: 144.4.

Chief of State: Francisco Franco y Bahamonde.

Principal cities (est. Dec. 31, 1948): Madrid, 1,273,504; est. 1949, 1,440,041 (capital); Barcelona, 1,145,745; est. 1949, 1,500,000 (chief port, textiles); Valencia, 592,687

(silk, oranges); Seville (Sevilla), 400,296 (wines, iron ore); Saragossa (Zaragoza), 307,215 (rail center); Málaga, 287,610 (seaport).

Monetary unit: Peseta.

Languages: Spanish, Basque, Catalan.

Religion: Roman Catholic.

HISTORY. Spain, twice the size of Oregon, was once one of the world's great powers. From 201 B.C. to A.D. 406, it was part of the Roman Empire. Then the Goths and the Vandals formed a powerful kingdom, which was partially conquered in the 8th century by the Moors from Africa. The last Moorish stronghold, the kingdom of Granada, fell to the forces of King Ferdinand and Queen Isabella, who were trying to unify Spain, in 1492. In the same year, the Spanish-financed explorer Christopher Columbus was discovering the new world for the Spanish crown.

Charles V (1516-55) became King of Spain and also Holy Roman Emperor. Under his son, Philip II, Spain reached the peak of its power, but the beginning of decline set in with Britain's defeat of the "Invincible" Armada in 1588.

The line of Spanish Hapsburgs ended in 1700, and the War of the Spanish Succession followed. By the Treaty of Utrecht (1713) Spain was forced to accept a Bourbon king, the Duke of Anjou, and lost Gibraltar and all holdings in the Netherlands and southern Italy. Then, while the Spaniards were resisting Napoleon's efforts to establish a Bonaparte line in Spain, most of their colonies in America revolted and became independent. The loss of Cuba, Puerto Rico and the Philippines in the Spanish-American War of 1898 left Spain with only a few scattered possessions in Africa. Neutrality was maintained during World War I.

From 1923 to 1930 Spain was a military dictatorship under General Miguel Primo de Rivera. A wave of republicanism in 1931 forced the abdication of King Alfonso XIII, and a new constitution was drawn declaring Spain to be a workers' republic. Several revolts, strikes and shifts of government kept Spain in political chaos, and on July 18, 1936, the army revolt led by General Francisco Franco burst into civil war. While Hitler and Mussolini helped Franco, Russia helped the Loyalist side. The last Loyalist forces surrendered on March 29, 1939. Spain became a dictatorship under Franco and signed the anti-Comintern pact in 1939.

While Franco shied away from the risk of becoming a belligerent in World War II, he was pro-Axis in sympathy, helped the Axis with supplies, intelligence and services to German U-boats, and even sent the Spanish Blue Division to fight Russia.

Meanwhile, monarchist sympathies remained strong both in and out of Franco's Falange party, and a Spanish Republican

"Government-in-exile" was formed in 1945. Yet Franco's position remains strong.

GOVERNMENT. Franco is head of the state, national chief of the Falange party, prime minister and *caudillo* (leader) of the empire. Practically, the country is ruled by the cabinet (appointed by Franco), the National Council of the Falange party and, to a lesser extent, the Cortés (parliament). The principal function of the Cortés is the planning and formulation of laws without prejudice to Franco's veto power. Cabinet ministers, party officials, civil governors, university heads, and the presidents of learned bodies become members of the Cortés *ex-officio*. There is no provision for the introduction of legislation by any of the 466 members.

In a referendum held July 6, 1947, the Spanish people approved a Franco-drafted succession law declaring Spain a monarchy again. Franco, however, is to continue as chief of state and upon his death or incapacity the Government and a Council of the Realm constituted by the law are to nominate as king "that person of royal blood who is most qualified by right," subject to the approval of the Cortés. The law reserves to Franco the right to nominate his own successor, subject also to the Cortés approval by two-thirds vote.

DEFENSE. Franco is commander in chief of the army, navy and air force, each administered by a cabinet minister responsible to him. Military service is compulsory for a period of two years. The standing army, estimated at 450,000 men, is divided into 22 divisions in Spain and four in Morocco. Planes in service (about 950) are predominantly German and Italian. The navy in 1950 had 6 cruisers, 13 fleet destroyers, 15 escort destroyers and frigates, 6 submarines and many smaller vessels. Several destroyers and smaller vessels were under construction. The budgetary allotment for defense is about 40 per cent.

EDUCATION, RELIGION AND SOCIAL POLICIES. The illiteracy rate was 20.8 per cent in 1947. Primary education is compulsory and free; religious instruction is permitted. In 1946-47 there were 54,055 public primary schools with 4,359,230 pupils, 118 secondary schools with 203,136 students, 53 normal schools with 25,928 students and (1947) 12 universities with 42,597 students.

Roman Catholicism is the established religion. After the civil war of 1936-39, the church was restored to substantially its pre-republican position; confiscated property was returned, religious education was reintroduced, and divorce was banned.

The labor charter promulgated March 9, 1938, defined Spain as a totalitarian and syndicalist state. So-called vertical syndi-

cates have supplanted all union organizations and all other organizations for the protection of the economic interests of productive groups. A branch of production extends "vertically" from the raw material stage through the industries and firms engaged in processing and marketing. Prices, wages and production, and the distribution of merchandise are controlled.

AGRICULTURE. Spain is predominantly agricultural, although there are extensive non-arable areas. The principal land uses, apart from forest, pasture and forage crops, are the production of grain, potatoes, pulse, sugar beets, oranges, grapes and olives. Since the civil war Spain has not recovered balance in production and consumption of foodstuffs. Normally, Spain produces exportable quantities of oranges, lemons, almonds, filberts, raisins and other subtropical commodities. Wine production in 1949 was about 396,000,000 U. S. gallons; olive oil production, about 270,000 metric tons.

PRINCIPAL CROPS (thousands of metric tons)

	1947	1948	1949*
Wheat	2,345	2,670	2,580
Barley	1,520	1,700	1,720
Rye	355	380	460
Oats	410	530	510
Corn	530	600	540

* Provisional.

Livestock, also important, included in 1947, 3,808,000 cattle, 19,500,000 sheep, 6,100,000 goats and 5,000,000 hogs. Wool production in 1949 was 35,000 metric tons.

TRADE. Statistics of foreign trade are as follows, in millions of U. S. dollars:

	1947	1948	1949
Exports	306	361	380
Imports	396	470	454

In 1949 the chief customers were the Spanish colonies, 26 per cent; Britain, 16 per cent; and France, 11 per cent. Leading suppliers were the Spanish colonies, 18 per cent; Argentina, 13 per cent; and the U. S., 9 per cent. Leading exports were oranges, 17 per cent; cotton textiles, 10 per cent; wine, 8 per cent; and iron pyrites and iron ore, 5 per cent. Leading imports were raw cotton, chemical products (especially fertilizer), wheat, petroleum and tobacco.

INDUSTRY. The textile industry, concentrated in Catalonia and normally employing over 300,000 workers, leads all others. The paper and chemical industries are also important. Pig-iron production in 1949 was 617,412 metric tons; steel production, 719,624 tons. On Mar. 31, 1950, 105 vessels of 114,387 gross tons were under construction.

COMMUNICATIONS. The merchant fleet, which suffered severely during the civil

war and World War II, comprised 1,331 vessels of 1,160,723 gross tons on Jan. 1, 1949. The national highway system is about 80,000 miles. In 1947, there were 7,950 miles of normal gauge (government-owned) and 2,970 miles of narrow gauge railway.

FINANCE. Recent data (budget estimates) are as follows, in millions of pesetas:

	1948	1949	1950
Revenue	15,115	16,071	17,847
Expenditure	15,196	16,629	17,941

The public debt in June, 1948, was 53,891,200,000 pesetas. Deficit financing, the enormous cost of reconstruction and World War II have contributed to persistent inflationary tendencies. The note issue of the Bank of Spain, amounting to 9,300,000,000 pesetas in July, 1940, was up to 27,600,000,000 pesetas by Apr., 1950.

MINERALS. Spain's mineral wealth, second to agriculture in the national economy, yields millions of tons of ore. In 1946 the mining and metallurgical industries employed 220,422 workers; output was valued at 5,003,331,344 pesetas. Following are production figures for 1949, in metric tons: coal and lignite, 11,963,148; iron ore, 1,811,112; lead ore, 36,323; zinc ore, 85,284; iron pyrites, 1,132,793; potash ore, 913,519; mercury (1947), 1,347. Spain also produces copper, gold, magnesite, sulfur, tungsten, phosphates, silver and, reportedly, uranium.

FORESTS AND FISHERIES. Spanish forests yield lumber, pine resins, cork and esparto. Some 100,000 persons work in the fishing, canning and related industries. The 1947 catch, principally cod, tunny and sardines, was 567,841 metric tons valued at 2,032,000,000 pesetas.

TOPOGRAPHY. Spain, less than ten miles from Africa at the closest point, and separated from France by the Pyrenees, is generally a broad plateau sloping to south and east and crossed by a series of mountain ranges and river valleys. Most of the coast line is steep and rocky, with few indentations. The best harbors are on the Galician coast in the north; the broadest coastal plain is on the Gulf of Cádiz in the southwest. The Guadalquivir River in the south is navigable to Seville, but most of the others are mountain streams useful only for waterpower. Hydroelectric stations account for 75 per cent of Spain's generating capacity.

CLIMATE. Most of Spain's weather is extreme. Madrid, for example, reaches a high of 110° and a low of 10°. In the southeast, the protection of the Sierra Nevadas makes the climate subtropical. The northeast, with climate much like that of the British

Isles, is the only region with normal rainfall. In the east and southeast, irrigation is requisite to farming.

OUTLYING ISLANDS. Off Spain's east coast in the Mediterranean are the Balearic Islands, which total 1,936 square miles. The largest is Majorca (1,405 sq. mi.). Sixty miles west of Africa in the Atlantic are the Canary Islands (2,804 sq. mi.).

SPANISH COLONIAL POSSESSIONS

Country	Area, sq. mi.	Population, est. 1948
Ceuta, Melilla, Alhucemas, Chaffarinas, and Peñon Velez	82	156,000
Spanish Morocco	7,589	1,082,009
Spanish Guinea	10,900	173,000
Western Sahara, including Ifni and Spanish Sahara	116,200	78,000

SPANISH MOROCCO. See **MOROCCO**

Sweden (Kingdom)

(Sverige)

Area: 173,341 square miles.
Population (est. Dec. 31, 1949): 6,987,000
(practically all Swedish).

Density per square mile: 40.3.

Sovereign: King Gustavus VI.

Prime Minister: Tage Fritiof Erlander.

Principal cities (est. Dec. 31, 1949):
Stockholm, 733,615 (capital); Göteborg,
349,145 (chief port, shipbuilding); Malmö,
189,232 (seaport); Norrköping, 84,035
(textiles); Hålsingborg, 71,151 (Baltic sea-
port).

Monetary unit: Krona.

Language: Swedish.

Religions: Swedish Lutheran, 99%;
others, 1%.

HISTORY. Sweden, one of the most progressive states in social welfare, maintained a precarious neutrality during World Wars I and II and suffered from being virtually cut off from world markets by British and German blockades. On the other hand, nearly everything that Sweden had to sell after 1939 was eagerly taken by one side or the other, subject only to the difficulties of delivery. As a result, Sweden has been able to follow an independent course, leaning toward the West but still co-operating economically with the Soviet Union and its satellites.

Refusing still to abandon its neutrality, Sweden did not join the North Atlantic alliance in the spring of 1949.

Although the ancestors of today's Swedes lived in the area as long as 5,000 years ago, little is known of Sweden be-

fore the 10th century. Before 1100, King Olaf Skötkonung had united Sweden into a strong nation and established Christianity. In 1397 Sweden was united with Norway and Denmark under the Union of Kalmar. After the murder of several prominent Swedes by Christian II of Denmark in 1520, Sweden revolted under the leadership of Gustavus Vasa. Gustavus, elected king in 1523, founded the modern Swedish state and was the first European monarch to break relations with the Pope.

By the Treaty of Westphalia (1648) which concluded the Thirty Years' War (during which Gustavus Adolphus scored a number of brilliant military successes), Sweden acquired important German areas, including large portions of Pomerania. In 1700, Poland, Denmark and Russia united against Sweden. When peace was finally concluded in 1721, Sweden gave up Livonia, Estonia, Ingria and parts of Finland. Sweden participated in the coalition against Napoleon (1805-07) but in 1809 Finland was lost to Russia. Following the ouster of King Gustavus IV in 1809, a constitutional law still in effect was adopted, after which Charles XIII, uncle of Gustavus IV, was elected king. Since Charles XIII was childless, one of Napoleon's marshals, Jean Bernadotte, was elected Crown Prince and took over effective control of the government, succeeding to the throne in 1818 as Charles XIV. By the Treaty of Kiel (1814), Sweden acquired Norway from Denmark in return for Pomerania. The union with Norway lasted until 1905, when it was peacefully dissolved.

Neutrality was maintained through both World Wars. In 1936 Per Albin Hansson formed a Social Democratic ministry which gave way on Dec. 12, 1939, to a national coalition cabinet under his leadership. On July 31, 1945, another wholly Social Democratic cabinet was formed by Hansson, who died in 1946 and was succeeded as prime minister by Tage Fritiof Erlander.

SOVEREIGN. Gustavus VI, born Nov. 11, 1882, married (1) 1905, Princess Margaret Victoria (born 1882, died 1920); (2) 1923, Princess Louise Mountbatten (born 1889). To his first marriage was born Prince Gustavus Adolphus (born Apr. 22, 1906, killed in air crash Jan. 26, 1947), who was married in 1932 to Sibylle, Princess of Saxe-Coburg-Gotha; their offspring include a son, Carl Gustavus, born April 30, 1946, and four daughters. Gustavus VI became king on Oct. 30, 1950, at the death of his father, Gustavus V. Heir apparent is Carl Gustavus, four years old.

GOVERNMENT. Sweden is a limited monarchy. Executive and judicial authority is vested in the king alone, but his resolutions must be taken in the presence of the

Council of State (cabinet), headed by the prime minister; the Council is appointed by the king but is responsible collectively to the Riksdag (parliament).

The Riksdag has an upper chamber of 150 members elected indirectly by the provincial and municipal councils for eight years, one-eighth being renewed each year. The lower chamber of 230 members is directly elected by popular vote for four years. There is universal suffrage for men and women over 21. The king has the right to initiate legislation and has an absolute veto over all bills except those relating to taxation.

Standings in the lower chamber (elections of Sept. 19, 1948): Social Democrat 112, Conservative 23, Agrarian 30, Liberal 57, Communist 8.

DEFENSE. Military service is compulsory from the ages of 20 to 47; the initial training period is 15 months. The king is commander in chief of all the armed forces. The army, numbering about 60,000, with a trained reserve of 600,000, is well-equipped with the latest type weapons, many of them developed in Sweden. The air force has 500 planes. The navy on Jan. 1, 1950, had 4 cruisers, 5 coast defense ships, 13 fleet destroyers, 8 escort vessels, 24 submarines, 2 minelayers and numerous smaller craft. Naval personnel numbers about 10,000 in addition to coast artillery, under naval jurisdiction.

EDUCATION. Public elementary education has been free and compulsory since 1842. In 1947-48 there were 550,000 pupils in regular elementary schools and, in 1948-49, 75,032 in state secondary schools. The two universities—Uppsala and Lund—and three other schools of university grade had a total enrollment of 9,742 in 1949. The state also provides a large number of special vocational and continuation schools. The national church is the Swedish Lutheran Church, of which the king is supreme administrator.

SOCIAL WELFARE. The extremely well-developed co-operative movement is a powerful factor in the country's economic life. The co-operatives account for about 10 per cent of the total retail trade and more than 20 per cent of the grocery business. Social legislation, also well-advanced, includes unemployment relief, loans and grants for housing, medical care, care of the indigent and the aged, and a public works program to curtail unemployment. The federation of trade unions had 1,147,015 members in 1947—about one-sixth of the population.

AGRICULTURE. Grain, hay, potatoes and sugar beets are products of the broad fertile plains of the south; cattle raising and

dairy farming predominate in the north. Production of major crops in 1949 was as follows, in metric tons: wheat, 698,000; rye, 277,000; corn, 178,000; oats, 840,000; mixed grains, 648,000; sugar beets, 1,770,000; potatoes, 1,720,000. The 1949 livestock census showed 464,911 horses, 2,584,452 cattle, 311,397 sheep and 1,237,634 hogs. Butter production in 1949 was 98,051 tons; cheese, 65,515 tons.

INDUSTRY. Industrial establishments in 1946 numbered 17,781 with 652,435 workers. The highly specialized machine industry produces separators, motors, electrical machines and apparatus, agricultural machinery, ball bearings, telephone equipment and harbor works. Pig iron production in 1949 totaled 811,000 metric tons and steel ingots and castings 1,371,000 tons. There are also large woolen, glass and porcelain industries. Shipyards build for both Swedish and foreign fleets; 57 vessels of 310,702 gross tons were under construction on Mar. 31, 1950. The timber and woodworking industries are extensive. The match industry is a single trust which covers the whole world and, with the help of British and American capital, monopolizes production in many countries.

TRADE. Statistics of foreign trade are as follows, in billions of kroner:

	1947	1948	1949
Exports	3.24	3.98	4.25
Imports	5.18	4.95	4.33

Leading exports in 1949 were wood pulp (19%), paper (9%), sawn timber (8%) and iron ore (8%). Leading customers were Great Britain (17%), Norway (9%), Western Germany (7%) and the U. S. (6%). The chief suppliers were Great Britain (17%), the U. S. (9%), Western Germany (6%) and Belgium (5%). Dwindling dollar reserves have forced Sweden to curtail U. S. purchases.

COMMUNICATIONS. On Jan. 1, 1949, the merchant marine comprised 2,204 ships (of more than 20 tons) with a gross tonnage of 2,057,000, largely motor vessels. The highly developed railway network totaled 10,475 miles in 1948, and there were (1949) 55,900 miles of highway, mostly improved. By means of ferry steamers, Swedish state railways are connected directly with both Germany and Denmark. Telephones in 1949 numbered 1,531,473 (221 per 1,000 persons), making the telephone system second only to the United States on a per capita basis. Airlines in 1945 had 16,500 route miles and flew a total of 8,074,431 miles in 1947.

FINANCE. The ordinary budget (1950-51) provided for revenue of 5,138,500,000 kr. and expenditure of 4,766,700,000 kr.; the surplus was to be used for capital expendi-

ture. The public debt was 12,046,000,000 kr. in Aug., 1949. The Riksbank (National Bank of Sweden), belonging entirely to the state, is the sole bank of issue.

MINERALS. Sweden's high-grade iron ore deposits are among the world's richest. Those in central Sweden produce principally for domestic use, while the ones in Lapland to the north are worked largely for export, with much of the output being shipped through the Norwegian port of Narvik. Production in 1949 was 13,748,000 tons. Gold production was 70,248 troy oz. Other major minerals are copper (20,683 tons), lead (11,757 tons), arsenic ore, manganese, pyrite ore, silver and zinc. Coal production (500,000 tons a year) is comparatively small; imports of nearly 8,000,000 tons a year are therefore necessary. Deposits of uranium have been reported. Wood and peat are extensively used as fuel. Sweden's many waterfalls have a potential of 13,000,000 kw., of which 2,800,000, or 21%, had been developed by the end of 1948. The largest hydroelectric works are state-owned.

FORESTS AND FISHERIES. About 60 per cent of Sweden is forested, mostly in pine, and there are vast forest products industries in the north. Sweden supplies a large percentage of the world's mechanical and chemical pulp. Production in 1948 included 2,925,635 metric tons of wood pulp and 1,087,813 tons of paper and cardboard, including 296,951 tons of newsprint.

The average annual catch of fish is about 140,000 tons, half of it in small Baltic herring. Cod, mackerel and sprat also are taken in the Baltic, and the inland lakes and rivers are well stocked with salmon, trout and perch. The catch in 1947 was 155,942 metric tons valued at 89,900,000 kr.

TOPOGRAPHY. Sweden, with extreme length of about 990 miles and breadth of 250 miles, slopes eastward and southward from its peak elevation in the Kjölen mountains along the Norwegian border. In the north are mountains and many lakes. To the south and east are central lowlands, and south of them are fertile areas of forest, valley and plain. Along Sweden's rocky coast, chopped up extensively by bays and inlets, are many islands, the largest of which are Gotland (1,220 sq. mi.) and Öland (519 sq. mi.). The country is landlocked to the north.

CLIMATE. Sweden's climate is diversified. The warmest month is usually July, with a mean temperature of 62° at Stockholm. February is the coldest month, with a mean average below 32° for all Sweden (25.7° at Stockholm). Average annual rainfall in the north is 16.5 inches; in the south, 22.5 inches.

Switzerland (Republic)

(Schweiz-Suisse-Svizzera)

Area: 15,940 square miles.

Population (est. Dec. 31, 1949): 4,660,000 (Swiss, 91.2%; German, 3.6%; Italian, 3.1%; French, .9%; others, 1.2%—figures by place of birth).

Density per square mile: 292.3.

President (1950): Max Petitpierre.*

Principal cities (est. Dec. 31, 1948): Zürich, 383,000 (textiles, banking); Basel, 180,800 (rail center, Rhine port); Geneva (Genève), 148,600 (intellectual center); Bern, 141,800 (capital).

Monetary unit: Swiss franc.

Languages: German, 71.9%; French, 20.4%; Italian, 6.0%; Romansch, 1.1%; others, .6%.

Religions: Protestant, 57%; Roman Catholic, 41%; Jewish, .4%; others, 1.6%.

* The vice president ordinarily becomes president the next year. Vice president in 1950: Eduard von Steiger.

HISTORY. Switzerland, twice the size of New Jersey, is a tourist mecca, but its rugged scenery is more than a commercial asset. Europe's aggressors for centuries, right up through World War II, have usually left Switzerland in peace, largely because of its formidable natural barriers.

Swiss history is principally the story of the drawing together of various fiefs of the Holy Roman Empire into a single union for common defense. The process began in 1291, with the cantons of Uri, Schwyz and Nidwalden as the nucleus. Over the next 300 years, ten new cantons entered the federation, which nominally remained part of the Holy Roman Empire until the Treaty of Westphalia gave it independence in 1648.

The French revolutionary army succeeded in occupying Switzerland in 1798 and organized it as the Helvetic Republic, but Napoleon restored the federation in 1803. The Congress of Vienna (1815) declared Switzerland an independent, neutral state in perpetuity, and fixed the nation's borders as they exist today. Out of the brief Swiss civil war of 1847 came the democratic constitution of 1848, which was influenced by the U. S. constitution.

Switzerland maintained strict neutrality in World Wars I and II, during which its diplomatic delegations represented the interests of many of the belligerents. Both sides bombed several Swiss cities by mistake in World War II. Switzerland was a center of both Axis and Allied espionage and counter-espionage during the war.

GOVERNMENT AND DEFENSE. Since the adoption in 1874 of their present constitution, the Swiss have had a federation of 22 sovereign cantons. Each canton has its own legislature, executive and judiciary departments, and the cantons have the right of veto over federal legislation through the referendum.

The Federal Assembly has two houses—a Council of States of 44 members, two from each canton, and a National Council of 194 members elected for four-year terms. The seven members of the cabinet (Federal Council) are elected for four years by the Federal Assembly, which also elects the Swiss president from among its own members for a period of one year. The federal government is supreme in matters of war, peace and treaties, and regulates the army, railroads, postal service, mints and national bank note issues.

In peacetime, the highest Swiss army officer is a colonel. In wartime a commander in chief is named with rank of general. Since the army is a national militia, it maintains no standing forces, but military service is compulsory from the ages of 18 to 60, with an initial training period of about three months and an 11-day refresher course once a year. The force of men trained and physically fit is about 650,000. The air force has about 5,000 personnel and 400 planes, maintained under the general staff.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is compulsory, free and locally controlled. In 1947-48, primary schools had 425,000 pupils, and secondary schools about 75,000. There are seven universities, with 13,182 students in 1947-48.

Religious freedom is guaranteed under the constitution. German, Italian and French were recognized as national languages in 1874, and Romansch, a dialect of the Alpine regions, was also made official in 1937.

With nearly a fourth of its land unproductive, and with half of it in pasture or forest area, Switzerland is dependent on imports for food supply. Wheat, potatoes, fruits, oats, barley, rye, sugar beets and grapes are grown, but stockraising and dairy farming account for three-fourths of the agricultural production. In 1949 there were 1,478,000 cattle, 183,000 sheep, 887,000 hogs and (1948) 187,000 goats.

Production of cheese in 1949 was 54,500 short tons, and that of butter, 14,900 short tons. Approximately 20 per cent of the population is engaged in agriculture. Total value of agricultural production in 1948 was 2,130,500,000 fr.

Manufacturing is the principal economic activity, with more than 40 per cent of the population being sustained by manufactures or mechanical pursuits. Industry is conducted largely in small plants using highly skilled workers. Almost all the raw materials are imported, and products consist almost exclusively of high grade, expensive commodities. In 1948 there were 11,364 industrial establishments with 531,353 workers.

Manufactures include chemical products,

machines, watches, textiles, aluminum, precision instruments, lumber, shoes and fine handmade embroidery. Chief agricultural industries are the manufacture of fine cheeses and condensed milk. With its many scenic attractions, Switzerland draws the heaviest and most profitable tourist trade in Europe.

Switzerland is dependent on foreign trade for its prosperity. Trade statistics are as follows, in millions of Swiss francs:

	1947	1948	1949
Exports	3,268	3,435	3,457
Imports	4,820	4,999	3,791

In 1949, the leading customers were the U. S. (12%), Germany (9%), Belgium (9%), France (7%) and Britain (5%). Leading suppliers were the U. S. (20%), France (10%), Germany (9%) and Britain (7%). Leading exports in 1948 were clocks and watches (24%), other metal manufactures (31%), chemicals (17%) and silk and cotton textiles (17%).

The Rhine, navigable from Basel to the North Sea, is the principal inland waterway. Railways built over rugged terrain, entailing construction of many bridges and tunnels, totaled 3,550 miles in 1947, mostly electrified. The railroads are of great strategic importance in communications between Germany and Italy. Road mileage totals about 10,500. State aerial service is gradually being developed.

Federal expenditure in 1949 was estimated at 1,423,700,000 fr. and revenue at 1,422,900,000 fr. The debt of the Confederation alone (excluding the railway debt) was 8,006,160,000 fr. on Dec. 31, 1948.

Minerals include small amounts of iron ore, gold and coal. Nearly 25 per cent of the country is covered by forest.

TOPOGRAPHY AND CLIMATE. Most of Switzerland is an irregular, mountainous plateau bordered by the great bulk of the Alps on the south and by the Jura Mountains on the northwest. Its greatest length is 226 miles, greatest width, 137 miles. A fourth of its total area is covered by scenic mountains and glaciers. The highest peaks are Monte Rosa (15,217 ft.) and Matterhorn (14,780 ft.), both on the Italian border, and the Jungfrau (13,667 ft.), southeast of Interlaken. The sources of the Rhine, Rhône and Aar are in Switzerland. The country's largest lakes, Geneva, Constance (Boden See) and Maggiore, straddle the French, German-Austrian and Italian borders, respectively. Neuchâtel, 92 square miles, is the largest wholly Swiss lake.

The climate is temperate and varies greatly with altitude. The coldest month (January), for example, averages 31.8° at Basel, which is 909 feet in elevation, and 16.2° at Säntis, with altitude of 8,202 feet. July is the warmest month, with a mean of 66.4° in Basel and 41° at Säntis.

Syria (Republic)

Area: 73,587 square miles.
 Population (est. 1948): 3,750,000 (Arab, Armenian, Kurdish, Turkish, French).
 Density per square mile: 51.0.
 President: Hashem Attasi Pasha.
 Premier: Nazim el-Kodsi.
 Principal cities (est. 1948): Damascus (Damas), 342,000 (capital); Aleppo (Alep), 369,000 (northern trading center); Homs, 111,000 (farming, silk); Hama, 82,000 (Bedouin trading center).
 Monetary unit: Syrian pound (£S).
 Languages: Arabic, Aramaic, French.
 Religions: Moslem (Sunni), 69.8%; Moslem (Alawite), 11.0%; Greek Orthodox, 4.6%; Armenian Orthodox, 3.5%; Moslem (Druze), 3.1%; others (Syrian Orthodox and Catholic, Greek and Armenian Catholic, Israelite, etc.), 8.0%.

HISTORY. Ancient Syria was conquered by Egypt about 1500 B.C., and after that by Hebrews, Phoenicians, Assyrians, Chaldeans, Persians and Greeks. From 64 B.C. until the Arab conquest in A.D. 636, it was part of the Roman Empire except during brief periods. The Arabs made it a trade center for their whole empire, but it suffered severely from the Mongol invasion in 1260 and fell to the Ottoman Turks in 1516. Syria remained a Turkish province until World War I.

A secret Anglo-French pact of 1916 put Syria in the French zone of influence. The League of Nations gave France a mandate over Syria after World War I, but the French were forced to put down several nationalist uprisings. In 1930, France recognized Syria as an independent republic, but still subject to the mandate. After nationalist demonstrations in 1939, the French high commissioner suspended the Syrian constitution. In 1941 British and Free French forces invaded Syria to eliminate Vichy control. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalist demonstrations broke into actual fighting, and British troops had to restore order. Syrian forces met a series of reverses while participating in the Arab invasion of Palestine in 1948. The government was overthrown March 30, 1949, in an Army *coup d'état* led by Husni Zayim, who was confirmed in office as president in a national referendum held June 25, 1949. On Aug. 14, Zayim was overthrown and executed by a group of military leaders who installed a coalition cabinet. A constituent assembly was elected on Nov. 15, 1949, to draft a new constitution.

GOVERNMENT AND DEFENSE. Prior to the *coup d'état* of March, 1949, Syria had a unicameral legislature popularly elected for four years by male citizens over 20. The premier and cabinet exercised executive power; the president, elected by the legislature, served a five-year term. Latakia

in the northwest and Jebel Druze in the south are part of Syria but have considerable autonomy. The Syrian army is organized around a cadre of *troupes spéciales* transferred from French to Syrian jurisdiction in Aug., 1945.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is compulsory. In 1947 Syria had 1,122 primary schools with an enrollment of 159,268, and 69 secondary schools with 13,435 pupils. There is a university at Damascus. Syria's mutually distrustful religions and sects are a serious weakness.

Agriculture and animal breeding are the main industries. Only half the land is arable, and only a third is actually cultivated. Most crops require irrigation. In 1948 Syria grew 550,000 metric tons of wheat and 260,000 tons of barley; other leading crops include sorghum, olives, cotton, grapes, lentils and tobacco. Stock-raising is important among nomads and semi-nomads.

Exports from Syria (and Lebanon) in 1949 totaled 111,104,000 Syrian-Lebanese pounds. Imports were £SL516,188,000. Chief exports were wheat and flour (24%), silk and cotton textiles (11%), wool and olive oil. Principal customers were Iraq (20%), Jordan (19%) and Italy (11%); chief suppliers, the U. S. (23%), Britain (21%) and France (13%).

In 1946 Syria had 3,966 miles of highway and (1948) 531 miles of railway.

The Syrian budget for 1949 balanced at £S131,000,000.

TOPOGRAPHY AND CLIMATE. Coastal Syria is a narrow plain. Back of that is a range of coastal mountains, and still farther inland is a steppe area. In the east is the Syrian Desert, and in the southeast next to Jordan is the Jebel Druze Range. The climate is subtropical, with rainfall averaging 50 inches on the coastal range but diminishing to less than four inches in parts of the desert. Summer temperatures at Aleppo range from about 75° at night to 100° during the day; winter temperatures, from freezing to 50°.

Thailand (Siam) (Kingdom)

(Muang Thai)

Area: 198,247 square miles.
 Population (est. 1949): 17,987,000 (1937: Thai, 90%*; Chinese, 3.4%; Indian and Malayan, 3.4%; others, 3.2%).
 Density per square mile: 90.7.
 Ruler: Rama IX (under regency).
 Prime Minister: Luang Pibul Songgram.
 Principal cities (census 1947): Bangkok (Krung Thep), 827,290 (capital, chief port); Khonkaen, 590,664 (trading center);

Chieng Mai, 534,623 (rice, teak); Chieng Rai, 476,118 (northern trading center).

Monetary unit: Baht.

Languages: Thai (Siamese), Chinese.

Religions (census 1947): Buddhist, 89%; Moslem, 4%; Christian and others, 7%.

* Including about 2,500,000 of Chinese descent born in Siam.

HISTORY. The Siamese first began moving down into their present homeland from the Asiatic continent in the 6th century A.D., and by the end of the 13th century ruled most of the western portion. During the next 400 years the Siamese fought sporadically with the Cambodians to the east and the Burmese to the west. The British obtained recognition of paramount interest in Siam in 1824, and in 1896 an Anglo-French accord guaranteed Siamese independence. In 1909 Siam renounced claims to suzerainty over four Malayan states in return for almost complete cessation of British interference in Siamese internal affairs. Siam declared war on the Central Powers in 1917.

A coup on June 24, 1932, changed the absolute monarchy into a representative government with universal suffrage. Thus shorn of much power, King Prajadhipok abdicated in March, 1935, in favor of his nephew, Prince Ananda Mahidol. After five hours of token resistance on Dec. 8, 1941, Siam yielded to Japanese occupation and became one of the springboards in World War II for the Japanese campaign against Malaya. After the fall of its pro-Japanese puppet government in July, 1944, Siam pursued a policy of passive resistance against the Japanese, and on Aug. 16, 1945, after the Japanese surrender, Siam repudiated the declarations of war it had made against Britain and the U. S. in 1942.

By a treaty signed with Britain and India Jan. 1, 1946, Siam renounced all war-time acquisitions of Malayan territory and agreed that no canal linking the Gulf of Siam with the Indian Ocean would be cut across Siamese territory without British concurrence. A Franco-Siamese agreement of Nov. 17, 1946, provided for the return to Indo-China of a border area ceded to Siam by Vichy France in 1941.

Luang Pibul Songgram, prime minister during the Japanese occupation, seized power in a bloodless coup on Nov. 9, 1947, and although his party was defeated in elections for the Constituent Assembly on Jan. 29, 1948, he retained power and was designated premier on Apr. 15, 1948.

On May 11, 1949, the name Thailand, under which the country was known during World War II, was readopted in place of Siam. King Rama IX, who was born Dec. 5, 1927, second son of Prince Mahidol of Songkhla, succeeded to the Siamese throne on June 9, 1946, when his brother, King Ananda Mahidol, died of a gunshot wound.

GOVERNMENT AND DEFENSE. Thailand is a constitutional hereditary monarchy. Under the constitution promulgated on March 23, 1949 to replace that of 1946, there is a bicameral legislature, with an upper house of 100 members appointed by the king and a lower house of 121 popularly-elected members. During the king's minority or absence, his powers are exercised by a regent who appoints the prime minister, whose cabinet must have the confidence of the legislature.

The 1937 defense act made military service compulsory for a period of two years between the ages of 18 and 30. The army had 30,000 regulars in 1940, and there was a fair-sized air force. On Jan. 1, 1950, the navy had 4 coast-defense ships, 2 sloops, 2 corvettes, 1 destroyer, 4 submarines, 10 torpedo boats and other small craft.

SOCIAL AND ECONOMIC CONDITIONS. Buddhist monasteries throughout Thailand control most of the elementary education in rural districts. In 1942 there were 19,743 primary and secondary schools with 2,620,207 pupils. The two universities had an enrollment of 11,525 students in 1937, the last year for which figures are available.

Almost 90 per cent of the population work at agriculture. Rice (1949: 5,630,000 metric tons) is the principal crop, the staple food and the leading export. It is the basis of Thailand's whole economy and the key to its prosperity. Next most important is rubber (exports 1949: 125,400 short tons). Other products include coconuts, corn, tobacco, cotton, sesame, sugar cane and soybeans. Livestock, poor in quality and quantity, is used mainly for hauling. Manufacturing is of little importance, except for native handicraft and food processing. Domestic business is largely controlled by Chinese.

Exports in 1948 amounted to 2,020,000,000 baht; imports, to 1,727,000,000 baht. Chief exports were rice (55%), rubber (18%) and tin (5%). Leading customers were Malaya and Singapore (33%), the U. S. (18%) and India (12%); leading suppliers, Hong Kong (22%), the U. S. (21%) and Malaya and Singapore (12%).

There are good water routes which handle about 80 per cent of all internal traffic. Bangkok, the chief port, 25 miles up the Chaopaya River from the Gulf of Siam, handles about 80 per cent of the foreign trade. Railways under government ownership total 2,032 miles, and in 1946 there were about 3,900 miles of highway. With 14 international airlines using its facilities in 1948, Bangkok is rapidly becoming the hub of commercial aviation in southeast Asia. Domestic route mileage in 1948 was 2,700.

The 1949 budget estimated expenditure

at 1,598,022,000 baht and revenue at 1,598,024,000 baht. The public debt on Dec. 31, 1948, included an internal loan of 332,475,000 baht, an external loan of £1,915,095, rupee credits of 44,296,439 and war surplus credits of U. S. \$9,629,406.

There are small deposits of many important minerals, and some precious stones. Only tin, gold, tungsten and salt are in commercial production. Tin output in 1940 was 20,841 tons (10% of the world total), but production was only 7,920 metric tons in 1949.

Almost 70 per cent of Thailand's total land area is forested. Teak, the main forest product, covers over one-third of this area, chiefly in the northern hill country. Production in 1948 was about 65,000 tons. Other forest products are thengnan wood, ironwood, ebony, rattan and sticklac.

Fisheries, both ocean and river, ordinarily rank second to agriculture in product value. The average catch of 40,000 tons includes mainly mackerel, as well as anchovies, mollusks and shellfish.

TOPOGRAPHY AND CLIMATE. Thailand, about three-fourths the size of Texas, supports most of its population in the central alluvial plain which is drained by the Chaupaya River and tributaries. The climate is monsoonal, but the full force of the monsoons is broken by the western frontier hills. Rainfall decreases from south to north. Humidity is always high, but temperatures fall as low as 40° in the November-February cool season. Inland temperatures often rise to 100° during the hot season.

Trans-Jordan. See Jordan

Trieste

(Free Territory under U. N. protection)

Area: 293 square miles.

Population (est. 1949): 345,000 (Italian, 85%; Slovene and Croat, 10%; others, 5%).

Density per square mile: 1,177.5.

Principal city (census 1936): Trieste, 237,717.

Monetary unit: Lira, Yugoslav dinar.

Religion: Predominantly Roman Catholic.

Languages: Italian and Slovene (official), Croat.

Focal point of Big Power dispute during the 1946 treaty negotiations, the tiny Free Territory of Trieste on the northeastern Adriatic took existence on Sept. 15, 1947. Soviet Russia had backed Yugoslav claims for the whole Istrian peninsula, including the port of Trieste, an ideal sea outlet for Soviet-dominated Danubia. The U. S. and Britain opposed these claims. A French

compromise was adopted which gave Yugoslavia the predominantly Italian cities of western Istria, including the Pola naval base; from the other predominantly Italian parts, consisting of the city and surrounding territory of Trieste, the Free Territory was formed under U. N. protection.

The territory formed part of Austria (Trieste from 1382) before World War I, and Trieste became the strategic port of central Europe and outlet for the trade of the Danube basin. By the treaty of Rapallo (Nov. 12, 1920) between Italy and Yugoslavia, the territory along with all of Istria went to Italy as part of "Italia irredenta." After the German collapse early in May, 1945, Tito's Yugoslav forces occupied the territory, determined to unite it with Yugoslavia. By an agreement of June 9, 1945, most of the area (197 sq. mi.) was put under temporary Yugoslav administration, but a smaller part (96 sq. mi.), including Trieste, was placed under Allied control.

The governor of the Free Territory, who cannot be an Italian or Yugoslav national, is appointed by the United Nations Security Council for a term of five years, after consultation with the Italian and Yugoslav governments. Legislative authority is vested in a popularly elected unicameral Assembly. The Council has not yet reached agreement on the choice of a governor; hence the territory is still administered by Anglo-U. S. and Yugoslav forces within the two zones defined by the peace treaty. The Yugoslav zone has virtually been incorporated into Yugoslavia.

On March 20, 1948, the U. S., Great Britain and France jointly proposed the return of Trieste to Italy. Yugoslavia countered with an offer to yield Trieste if Italy in turn would give up the city of Gorizia, but the Italian government refused.

Turkey (Republic)

(Türkiye Cümhuriyeti)

Area: 296,185 square miles.

Population (est. 1949): 19,623,000 (Turkish, 94%; Greek, 2.2%; Bulgarian, 1.4%; Yugoslavian, .9%; others, 1.5%)*.

Density per square mile: 66.3.

President: Celâl Bayar.

Premier: Adnan Menderes.

Principal cities (census 1945): Istanbul (formerly Constantinople) 845,316 (chief port, commercial center); Smyrna (Izmir), 200,088 (seaport); Ankara (Angora), 227,505 (capital); Adana (Seyhan), 100,367 (agricultural center); Brusa, 86,021 (silk, carpets); Eskisehir, 80,096 (trading center).

Monetary unit: Turkish pound.

Languages: Turkish, Greek, Bulgarian.

Religions: Mohammedan, 98.6%; others, 1.4%.

* 1935, by place of birth.

HISTORY. Successor to the once great Ottoman Empire, Turkey is a nation of striking contrasts ranging from the multi-racial metropolis of Istanbul to the dreary ranges of Anatolia. It has made marked advances toward modernization and Westernization under the original impetus of the national hero, the late Kemal Atatürk.

The Ottoman Turks first appeared in the early 13th century A.D. Under the leadership of their aggressive sultans, they gradually spread their hegemony over most of the Near East and the Balkans, capturing Constantinople in 1453 and storming the gates of Vienna in the 17th century. At the height of its power, the Empire stretched from the Persian Gulf to the frontiers of Poland and from the shores of the Caspian Sea to Oran in Algeria.

The defeat of the Turkish navy at Lepanto in 1571 by the Holy League and of Turkish forces besieging Vienna in 1683 portended the decline of Ottoman power, reducing Turkey to the status of a pawn in Europe's political maneuvers. Russia moved into the Balkans in the 18th century and made herself official protector of the Balkan Christians. Fear of a Russian drive on Constantinople prompted England and France to declare war on Russia, and the Crimean War (1853-56) followed. As a result of the Russo-Turkish war (1877-78), Bulgaria became practically independent, and Rumania and Serbia threw off their nominal allegiance to the sultan. Further defeats were suffered by Turkey in a war with Italy (1911-12) and in the Balkan Wars (1912-13). Meanwhile, a revolt led by the Young Turks, an organization of youthful liberals, had forced the abdication of Sultan Abdul-Hamid in 1909 and established a constitutional regime.

On Aug. 2, 1914, at the outbreak of World War I, a secret alliance was signed between Germany and Turkey, whose army was advised by a German military mission, and in September the Allies declared war on Turkey. Turkish forces successfully defended the strategic Dardanelles, but British forces seized Palestine, Mesopotamia and Syria; and the Hejaz revolted. By 1918 Allied forces held the territory along the Dardanelles and the Bosphorus, and later Greek forces occupied Smyrna and vicinity.

In 1919 the new Nationalist party, headed by Mustafa Kemal, was organized to resist the Allied occupation, and in 1920 a National Assembly elected Mustafa Kemal president of both the assembly and the government. Under his leadership, the Nationalist government was recognized by foreign powers, the Greeks were driven out of Smyrna, and other Allied forces were withdrawn. The present Turkish boundaries (with the exception of Alexandretta, ceded to Turkey by France in 1939) were fixed by the Treaty of Lausanne (1923)

and later negotiations. The caliphate and sultanate were separated and the sultanate abolished on Oct. 1, 1922. On Oct. 29, 1923, Turkey formally became a republic with Mustafa Kemal, who took the name of Kemal Atatürk, as its first president. He carried out an extensive program of reform, modernization and industrialization.

The Montreux Convention (1936) abrogated a number of provisions of the Treaty of Lausanne relating to the Straits and authorized Turkey to fortify the former demilitarized zone. Turkey was given sole responsibility for the defense of the area. On Aug. 7, 1946, Soviet Russia proposed in a note to Turkey that defense of the Straits be made a joint Turkish-Soviet responsibility under a revision of the Montreux Convention, but the proposal was opposed by both Britain and the U. S., as well as by Turkey.

General Ismet İnönü was elected to succeed Kemal Atatürk on the latter's death in 1938 and was re-elected in 1939, 1943 and 1946, but was defeated in 1950 and succeeded by Celâl Bayar. On Oct. 19, 1939, a mutual assistance pact was concluded with Britain and France. Turkey followed a neutral course during most of World War II, but on Aug. 2, 1944, she broke off relations with Germany, and on Jan. 3, 1945, with Japan. On Feb. 23, 1945, she declared war on Germany and Japan, but took no active part in the conflict. After the abrogation of the Soviet-Turkish non-aggression pact in March, 1945, Turkey was subjected to Soviet pressure for a share in the control of the Dardanelles. To assist Turkey in effecting modernization necessary for the preservation of its national integrity, the U. S. in 1947 agreed to advance \$100,000,000, all of which was to be used for the armed forces or to a lesser extent for economic projects directly related to Turkish defense. Turkey has also received aid under the European Recovery Program.

GOVERNMENT. The constitution, as amended in 1937, defines the Turkish state as "republican, nationalist, populist, étatist, secular, and revolutionary." The president is chosen from the deputies of the National Assembly; his term of office is identical with the life of each Assembly. The 487 members of the Assembly are elected by universal suffrage for a term of four years. According to the constitution, the Assembly exercises the executive power through the president and Council of Ministers (cabinet) appointed by him. It may at any time control the actions of the government and at any time dismiss it.

The Republican People's party, which had been in power since 1923, was overwhelmingly defeated in free elections held May 14, 1950, by the Democratic party. The latter won 408 seats in the assembly. Peo-

ple's party 69, National party 1, independents 9. Centralization is the basis of the governmental system. The pre-republic judicial system, based on Sunni Moslem law, was replaced in 1926 by a new system based on the Swiss civil code.

DEFENSE. Military service is compulsory from 20 to 45; the initial training period is three years. The strength of the army, mobilized since 1930, is about 650,000. Large purchases of modern matériel were made during World War II, and additional armaments were received from the U. S. in 1947-50. The air force, under the direct control of the Turkish General Staff, had a strength of about 1,050 planes in 1947. The navy has 1 battle cruiser, 12 fleet destroyers and 10 submarines, in addition to smaller craft, including a number of former U. S. and British minesweepers.

EDUCATION. Elementary education is nominally obligatory from 7 to 16. In 1948 there were about 15,000 primary schools with 1,500,000 pupils, and 351 secondary schools with enrollment of 96,900. There were 34 institutions of higher learning with 26,000 students in 1948. The Latin alphabet replaced the Arabic script in 1928.

AGRICULTURE AND INDUSTRY. Agriculture is the principal economic activity, engaging about 65 per cent of the population. Only about 20 per cent of the land is under cultivation, but the government has made great efforts to modernize and improve farming. The most important cash crop is tobacco (1948: 74,000 metric tons) with the best quality coming from the Pontic coast near Samsun and also from Bafra, Sinop and Trebizond. Cotton (1949: 97,000 metric tons, ginned) is grown in the south of Asia Minor while figs come exclusively from the Smyrna region. Principal grain crops, with 1949 production in metric tons, are wheat, 2,495,000; barley, 1,282,000; oats, 237,000; and corn, 690,000. Turkey is a leading exporter of olive oil; the Brusa region and the Ionian coast are the principal areas of cultivation. Opium poppies are grown in the Smyrna, Malatia and Tokat regions.

Turkey is rich in livestock. The most important animal is the goat, of which there were 18,558,000 in 1948, including the valuable Angora which thrives on the uplands of the plateau. There were also 10,279,000 cattle, 1,164,000 horses, 1,711,000 asses and 25,840,000 sheep in 1949. Wool production in that year was 32,000 metric tons.

In 1941 Turkey had 1,052 industrial establishments. Staple industries have been established in iron, steel, textiles, paper, glass, sugar and cement. A large proportion of the factories are government-operated. Istanbul is the major industrial area.

TRADE. Turkey's foreign trade was as follows, in millions of Turkish pounds:

	1947	1948	1949
Exports	625.2	551.0	693.9
Imports	685.0	770.1	812.6

Principal customers in 1949 were Western Germany (16%), the U. S. (14%), Britain (12%) and Czechoslovakia (8%). Leading suppliers were the U. S. (20%), Britain (17%), Czechoslovakia (8%) and France (5%). Chief exports were tobacco (37%), raw cotton (10%), sultanas and nuts; leading imports, machinery, iron and steel and fuel and oil.

COMMUNICATIONS AND FINANCE. In 1948 Turkey had a merchant fleet of 241,000 gross tons. The total length of railways (1948) was 4,652 miles, all state-owned. Highway mileage in that year was 26,536.

Governmental expenditure and revenue estimates for the fiscal year beginning Mar. 1, 1950, were £T1,487,208,563 and £T1,313,269,563, respectively. The public debt on Nov. 30, 1949, was £T2,133,000,000.

MINERALS AND FORESTS. Turkey's rich mineral resources are still comparatively unexploited. Deposits of copper in the large field at Arghana, near the Iraq-Syrian frontier, have been estimated at 1,600,000 tons (1948 output: 11,000 metric tons). Turkey is also relatively rich in coal, with large deposits in the Ereğli region on the Pontic coast some 150 miles from Istanbul (1948 output: 4,022,000 tons). A virtual world monopoly is enjoyed in meerschaum, found in the Eskisehir district. Other important minerals include chrome, manganese ore, emery and antimony.

Nearly nine per cent of the total area of Turkey in Asia is forest land, covering 25,419 square miles. A large proportion of Eastern Thrace is also under forest, covering 1,648 square miles.

TOPOGRAPHY AND CLIMATE. Turkey is divided into two natural areas by the historic waterway formed by the Dardanelles, the Sea of Marmara and the Bosphorus. Turkey in Europe comprises an area about equal to the state of Massachusetts. It is hilly country drained by the Maritsa River and its tributaries. Almost all the population is concentrated in and near the two important towns, Istanbul (Constantinople) and Edirne (Adrianople). Turkey in Asia, or Anatolia, about the size of Texas, is roughly a rectangle in shape with its short sides on the east and west. Its center is a treeless plateau rimmed by mountains. Along the seacoast the elevation drops steeply to a wooded plain some 75 miles wide. On the land frontiers, the belt of forest clothes the foothills of the Taurus Mountains and the Armenian highlands.

Turkey has a great variety of climate. Along the coast from Antioch to the Dardanelles the climate is Mediterranean, with rainy winters and dry summers. Thence to the Bosphorus it is transitional to the type of climate with heavy year-round rainfall. Semitropical fruits and tea may be grown in the region beyond Trebizond on the Black Sea. The western plateau has a harsh steppe climate, with cold winters, hot summers and scanty rainfall, while the eastern plateau exhibits a transition from steppe to alpine climate. Istanbul has a mean annual temperature of 57° (maximum 99°, minimum 17°) and average yearly rainfall of 28.3 inches. Rain falls approximately one day out of three.

Union of Soviet Socialist Republics

Area (est.): 8,473,444 square miles* (8,173,666 in 1938).

Population (est. 1945): 192,900,000* (170,467,186 by 1939 census) (Great Russian, 58.4%; Ukrainian, 16.6%; Byelorussian, 3.1%; Uzbek, 2.9%; Tartars, 2.5%; Kazakhs, 1.8%; Armenian, Azerbaijani, Georgian, each 1.3%; more than 100 others, 10.8%).

Density per square mile: 24.9.*

Chairman of Presidium of Supreme Council: Nikolai M. Shvernik.

Premier: Joseph Vissarionovich Stalin.

Principal cities (census 1939): Moscow, 4,137,018 (capital); Leningrad, 3,191,304 (industrial center, shipbuilding); Kiev, 846,293 (industrial center, Ukraine); Kharkov, 833,432 (iron and steel, coal); Baku, 809,347 (oil center, Azerbaijan); Gorki, 644,116 (iron and steel); Odessa (1937), 604,223 (chief Black Sea port); Tashkent, 585,005 (textiles, tobacco); Tiflis (Tbilisi), 519,175 (building materials, leather); Rostov on Don, 510,253 (grain, shipbuilding).

Monetary unit: Rouble.

Languages: See Population.

Religions: Russian Orthodox (predominant), Mohammedan, Roman Catholic, Jewish, Lutheran.

* Including acquisitions since 1939.

HISTORY. With an area almost three times that of the U. S. and a population perhaps one and one-half times larger, the vast Soviet Union has risen in 30 years from a war-stricken agricultural state torn by internecine strife to a great industrial-agricultural federation holding a place second only to that of the U. S. in world power. A police state with a government-owned economy directed by a small Communist minority, the Union successfully absorbed mighty German attacks in 1941-42 and rebounded to drive back into Germany itself.

After the war, with its eastern European satellites drawn together into a solid bloc in opposition to the western democracies, the Soviet Union launched a full-scale po-

Rulers of Russia Since 1462

	Born	Reigned
Ivan III the Great ¹	1440	1462-1505
Basil III ¹	1479	1505-1533
Ivan IV the Terrible ²	1530	1533-1584
Theodore I	1557	1584-1598
Boris Godunov	c.1551	1598-1605
Theodore II	1589	1605-1605
Demetrius I ³	?	1605-1606
Basil IV Shuiski	?	1606-1610
"Time of Troubles" ⁴		1610-1613
Michael Romanov ⁵	1596	1613-1645
Alexis I	1629	1645-1676
Theodore III	1656	1676-1682
Ivan V ⁶	1666	1682-1689
Peter I the Great ⁷	1672	1682-1725
Catherine I	c.1684	1725-1727
Peter II	1715	1727-1730
Anna	1693	1730-1740
Ivan VI	1740	1740-1741
Elizabeth	1709	1741-1762
Peter III	1728	1762-1762
Catherine II the Great	1729	1762-1796
Paul I	1754	1796-1801
Alexander I	1777	1801-1825
Nicholas I	1796	1825-1855
Alexander II	1818	1855-1881
Alexander III	1845	1881-1894
Nicholas II	1868	1894-1917

PROVISIONAL GOVERNMENT

Prince Georgi Lvov		
(premier)	1861	1917-1917
Alexander Kerensky		
(premier)	1881	1917-1917

U.S.S.R.

Nikolai Lenin (premier)	1870	1917-1924
Joseph Stalin (premier) ⁷	1879	1924-

¹ Grand Duke of Muscovy.

² First tsar of Russia; had himself crowned as such in 1547.

³ Also known as Pseudo-Demetrius. His origin is obscure. He claimed to be Ivan IV's youngest son, Demetrius, who had been murdered in 1591. Demetrius I conquered Moscow in 1605 but was killed in 1606. From 1607-12, two other men, posing as Demetrius, attempted to capture Moscow but failed.

⁴ During this period, the throne remained empty.

⁵ First of the Romanov line, which lasted until the Russian Revolution. Michael was the grandnephew of Ivan IV.

⁶ Ruled jointly until 1689, at which time Ivan V was deposed.

⁷ As General Secretary of the Communist Party, Stalin was actual head of the Soviet Union from 1924-41. In 1941, he became premier.

litical offensive against the non-Communist world, particularly the United States and Great Britain.

Efforts to discredit Anglo-U. S. influence were initially a failure. The western powers countered the Soviet blockade of Berlin with a highly effective "air-lift," completed the unification of western Germany and went on to unite all of western Europe (except Spain) into a solid wall of opposition to Communist aggression through the vehicle of the North Atlantic Pact. Nevertheless, there has been no indi-

cation of a change in Soviet plans or aims, and the Korean war was interpreted by many in 1950 as the start of widespread Communist military aggression to supplement the political "cold war." Evidence of an atomic explosion in the Soviet Union in the summer of 1949 was reported by President Truman on Sept. 23, 1949.

The recorded history of Russia begins with the perhaps legendary figure of the Viking Rurik, who according to tradition came to Russia in A.D. 862 and founded the first Russian dynasty in Novgorod. The various tribes were united by the spread of Christianity in the 10th and 11th centuries; Vladimir "the Saint" was converted in 988. During the 11th century the grand dukes of Kiev held such centralizing power as existed. In 1240 Kiev was destroyed by the Mongols, and the Russian territory was split into numerous smaller dukedoms, out of which three large centers emerged—Galicia, Moscow and Novgorod. The early dukes of Moscow extended their dominions through their office of tribute collector for the Mongols.

In the late 15th century, Ivan III, the reigning duke, acquired the rival kingdoms of Novgorod and Tver and threw off the Mongol yoke. Ivan IV, the Terrible (1533–84), first Muscovite duke to assume the title of tsar, is considered to have founded the Russian State. He crushed the power of rival princes and boyars (great land-owners), but Russia remained largely medieval until the reign of Peter the Great (1682–1725), grandson of the first Romanov tsar, Michael (1613–45). Peter effected extensive reforms aimed at Westernization, and through his defeat of Charles XII of Sweden at the Battle of Poltava (1709), he extended Russia's boundaries to the west. Catherine the Great (1762–96) continued Peter's Westernization program and also expanded Russian territory, acquiring the Crimea and part of Poland. During the reign of Alexander I (1801–25), Napoleon's attempt to subdue Russia was defeated (1812–13), and new territory was gained, including Finland (1809) and Bessarabia (1812). Alexander was the originator of the Holy Alliance which crushed for a time Europe's rising liberal movement. Between the Napoleonic Wars and World War I, a few reforms were introduced, but the autocratic power of the tsars remained unchanged.

During the reign of Alexander II (1855–81), Russia's borders were pushed to the Pacific and into central Asia. Serfdom was abolished in 1861, but heavy restrictions were imposed on the emancipated class. Revolutionary strikes following Russia's defeat in the war with Japan forced Nicholas II (1894–1917) to grant a representative national body (Duma), elected by narrowly limited suffrage. It met for the first time in 1906. Nicholas continued

in his reactionary course, however, and the overwhelmingly liberal Duma had little or no influence in the government.

World War I demonstrated the corruptness and inefficiency of the tsarist regime, although the call of patriotism held the poorly equipped army together for a time. Disorders broke out in Petrograd (now Leningrad) in March, 1917, and, following the winning over of the Petrograd garrison, the revolution was in full swing. Nicholas was forced to abdicate under pressure from the Duma and was later killed by the revolutionists. A provisional government was formed, composed of both conservative and radical elements. This government, under the successive premier-ships of Prince Lvov and Alexander Kerensky, a Menshevik or moderate socialist, soon lost ground to the radical or Bolshevik wing of the Socialist Democratic Labor Party. Finally, on Nov. 7, 1917, came the Second Revolution, engineered by Nikolai Lenin and Leon Trotsky and their small but well-disciplined Bolshevik following in the Petrograd Soviet. The government was turned over the next day to the Congress of Soviets (councils of soldiers, peasants and workers), which vested the government in a Council of People's Commissars with Lenin as premier and Trotsky as foreign minister. The humiliating Treaty of Brest-Litovsk (March 3, 1918) concluded the war with Germany, but civil war and intervention by foreign powers prevented the new Communist government from gaining control of all Russia until 1920. A brief war with Poland in 1920 resulted in Russian defeat and withdrawal.

On July 6, 1923, the vast territory under Soviet rule—previously an inchoate mass whose constituent parts were changing constantly—became the Union of Soviet Socialist Republics, formed by the union of the Russian S.F.S.R. and the Ukrainian, Byelorussian and Transcaucasian S.S.R.'s.

The sudden death of Lenin (Jan. 21, 1924) precipitated an intraparty struggle between the group led by Joseph Stalin, general secretary of the party, and the opposition, led by Trotsky, which favored not only swifter socialization at home but fomentation of revolution abroad. In 1927, Trotsky and other opposition leaders were expelled from the party and exiled. The first Five-Year Plan (1928–32) called for gradual, progressive increase in industrial and agricultural production. Its collectivization program was opposed by the Kulaks, or wealthier peasants, who were vigorously suppressed. Purges carried out in 1936–38 removed many prominent leaders of the Revolution and high-ranking army officers.

Soviet foreign policy—first featured by friendship with Germany and antagonism toward England and France and then,

after Hitler's rise to power in 1933, by participation in the League of Nations and an anti-Fascist program—took another abrupt turn on Aug. 24, 1939, with the signing of a Soviet-German nonaggression pact. Territory seized from Poland (Sept., 1939) became part of the Ukrainian and Byelorussian S.S.R.'s; that secured from Finland at the conclusion of the Finnish war of 1939–40, part of the Karelian S.S.R. set up March 31, 1940; that secured from Rumania (Bessarabia and northern Bukovina), part of the Moldavian S.S.R. set up Aug. 2, 1940; and finally the formerly independent states of Estonia, Latvia and Lithuania, occupied in June, 1940, were absorbed into the U.S.S.R. as the 14th, 15th and 16th Soviet Republics. The latter annexations have not been recognized by the United States, Britain, or the majority of other nations.

Immediately following the German attack (June 22, 1941), all necessary powers for the defense of the state were vested in the State Defense Council headed by Stalin, who had taken over the post of premier on May 6. The Germans quickly seized approximately 500,000 square miles of Soviet territory, but Soviet forces resisted stubbornly, aided by increasing amounts of matériel from the U. S. and Britain. The great Soviet counteroffensive in the Stalingrad area (Nov., 1942–Feb., 1943) marked the turning point. Soviet troops gradually pushed the Nazis back and unleashed their final great offensive on Jan. 12, 1945. The nonaggression pact with Japan (1941) was denounced in April, 1945, and, following the declaration of war on Japan (Aug. 8, 1945), Soviet Far Eastern forces quickly occupied Manchuria, Karafuto and the Kuriles.

After the end of the war, the fourth Five-Year Plan was launched in Sept., 1945, with emphasis on the expansion of heavy industry.

GOVERNMENT. Under the constitution of 1936, the Soviet Union is "a Socialist State of Workers and Peasants" whose highest organ is the Supreme Council of the Union, which exercises legislative authority. It consists of two co-equal Houses—the Council of Nationalities, in which each constituent republic has 25 representatives, each autonomous republic 11, each autonomous oblast five, and each national okrug one (total 657); and the Council of the Union, elected on a nationwide basis with one representative for each 300,000 of population (total membership 671). All representatives are elected for four-year terms; the last election was held on Mar. 12, 1950. Elections amount to a blanket endorsement (or rejection) of a single list of candidates already nominated by the Communist Party, youth organizations, collective farms and trade unions. The only

election in the Western sense of the word takes place in the selection of the nominees by these groups. All citizens over the age of 18 are enfranchised.

The Presidium of the Supreme Council acts as a directive body between the sessions of the Supreme Council. It has a chairman (sometimes referred to as the Soviet president), 16 vice chairmen (one for each constituent republic), a secretary and 24 members, all elected by the Supreme Council.

The highest executive and administrative power is exercised by the Council of Ministers (formerly People's Commissars) appointed by the Supreme Council and headed by a chairman (premier) and 13 vice chairmen. It issues decrees and executive orders on the basis of laws in operation and supervises their execution. The administrative machinery is necessarily vast and complicated, since it is responsible not only for the ordinary administrative functions of government, but also for the operation of state-owned enterprises.

The 16 constituent republics of the Union are as follows: the Russian Soviet Federated Socialist Republic (capital: Moscow) covering about 80 per cent of the total area; the Ukrainian S.S.R. (Kiev); Byelorussian S.S.R. (Minsk); Armenian S.S.R. (Erivan); Azerbaijan S.S.R. (Baku); Georgian S.S.R. (Tiflis); Turkmen S.S.R. (Ashkhabad); Uzbek S.S.R. (Tashkent); Tadzhik S.S.R. (Stalinabad); Kazakh S.S.R. (Alma Ata); Kirghiz S.S.R. (Frunze); Karelo-Finnish S.S.R. (Petrozavodsk); Moldavian S.S.R. (Kishinev); Lithuanian S.S.R. (Vilnius); Estonian S.S.R. (Tallinn) and Latvian S.S.R. (Riga).

Postwar territorial acquisitions include the Carpatho-Ukraine (12,617 sq. mi.) obtained from Czechoslovakia June 29, 1945, incorporated into the Ukrainian S.S.R. as Zakarpatskaya Oblast; the Republic of Tannu Tuva in central Asia (64,000 sq. mi.) incorporated early in 1945 into the R.S.F.S.R. as the Tuvinian Autonomous Oblast; Karafuto or southern Sakhalin (13,935 sq. mi.) and the Kurile Islands (3,944 sq. mi.), occupied by Soviet troops in Aug., 1945, and incorporated into the Khabarovsk Kral of the R.S.F.S.R.; the northern part of eastern Prussia (about 7,000 sq. mi.), placed under *de facto* Soviet administration at the Potsdam Conference and incorporated into R.S.F.S.R. as Kaliningrad (formerly Königsberg) Okrug; the Petsamo district of Finland, obtained *de jure* under the 1947 treaty and incorporated into the Murmansk Oblast of the R.S.F.S.R.; and Poland east of the Curzon Line (77,703 sq. mi.), under terms of the Soviet-Polish treaty of Aug. 16, 1945, incorporated into the Ukrainian and Byelorussian S.S.R.'s.

COMMUNIST PARTY. The only political party permitted to exist in the Soviet Union is the All-Union Communist Party, which now has more than 6,000,000 members. Its organization parallels the entire governmental and economic structure of the country and guides all important action through instructions from the central organs to Party members who occupy most of the important political and economic positions. Its highest organ is the All-Union Party Congress, which meets irregularly. The Congress elects a Central Committee (71 members, 68 alternates), which in turn elects: (1) an executive body (Politburo) with ten members and four alternates, (2) an organizational bureau (Orgburo), which manages the Party, (3) a secretariat headed by a general secretary (Stalin), and (4) a Committee of Party Control with 31 members.

The members of the all-powerful Politburo as reported in April, 1949, are Stalin, V. M. Molotov, A. A. Andreyev, K. E. Voroshilov, L. M. Kaganovich, A. I. Mikoyan, N. S. Khrushchev, L. P. Beria, G. M. Malenkov. Alternates were N. A. Bulganin, A. N. Kosygin and N. M. Shvernik. There were two vacancies.

In Sept., 1947, the Cominform (Communist Information Bureau), a Soviet-dominated organization composed of representatives from nine national Communist parties, was established in Belgrade. Its headquarters were moved to Bucharest after the break with Tito in June, 1948. It was designed to replace the Comintern (dissolved in 1943) as an instrument in the promotion of worldwide communism. The new unit was described as representing the core of a united front against the threat of "reactionary and imperialist aggression," typified most immediately in the Soviet-boycotted European Recovery Program.

DEFENSE. The land, air and sea forces were under the unified control of the Armed Forces ministry until Feb., 1950, when a separate Navy ministry was created. The army, the navy, the air force and the supply services have separate staffs and commanders operating under its general supervision. Military service is compulsory; the initial training period varies from 2 to 5 years. The armed forces, which were estimated to have reached a peak of more than 15,000,000 in mid-1945, numbered about 4,000,000 in 1949. The strength of the army, including MVD and NKVD troops (secret police organizations with paramilitary formations) was estimated at slightly more than 3,000,000, organized in about 190 divisions, only a third of which were at full strength (10,000). The air force had from 400,000 to 500,000 men and about 25,000 planes, and the navy from 500,000 to 600,000. More than 500,000 troops

were stationed outside Soviet borders, and at least 700,000 were estimated to be located in Siberia and the Soviet Far East.

Information about the Red fleet is as vague as that about the army and air force. In 1950 it was believed to have a tonnage of about 550,000, including 3 battleships, 14 cruisers, 2 coast defense ships, 60 destroyers, 24 escort destroyers, 360 submarines, and large flotillas of coastal and river craft, patrol vessels, minesweepers and other small ancillary craft. An extensive naval construction program under the fourth Five-Year Plan is in progress. In 1949 the Soviet Union received 45 vessels from the Italian fleet, including a battleship and a cruiser. At the same time it returned to Britain and the U. S. ships borrowed in 1944, including the battleship H.M.S. *Royal Sovereign* and the cruiser U.S.S. *Milwaukee*.

On its face, about 19 per cent of the 1950 budget was allotted for military expenditures, but expenses linked to the armed forces in other parts of the budget, including police allotments and industrial commitments under the Five-Year Plan, greatly increased this percentage.

EDUCATION. The school system throughout the country is based upon uniform text books and the same syllabus, although a number of hours are allowed for native language, literature and history in the non-Russian schools. All schools are state controlled, and compulsory education begins at the age of seven. Coeducation is being abolished and separate schools established for boys and girls. The boys' curriculum stresses military training; the girls', housework. Enrollment in primary and secondary schools in 1949 was 34,000,000. Under the Defense Ministry are the newly established Suvorov military schools for the training of future officers. In 1949, 837 colleges and institutions of higher learning were functioning, with a student body of 770,000. Literacy was estimated at 81 per cent in 1940.

AGRICULTURE. Formerly an agricultural country, the Soviet Union has grown in the last 25 years into an industrial-agricultural power, with agriculture making great advances at the same time. The total area under cultivation was 259,500,000 acres in 1913, 291,600,000 acres in 1929, and 388,000,000 acres in 1941.

PRODUCTION OF GRAIN CROPS (in millions of bushels)

	1935-39 average	1947
Wheat	1,124	875
Wheat	885	920
Rye	425	310
Barley	170	125
Malze	1,165	820
Oats		

ANIMAL INDUSTRY (millions of head)

Animal	1916	1933	1947
Horses	35.8	16.6	11.9
Cattle	60.6	38.4	52.0
Sheep and goats	121.2	50.2	84.7
Pigs	20.9	12.1	13.4

The Union's diverse climate permits the growing of the most varied crops, ranging from the temperate to the subtropical. Under the current Five-Year Plan, it was contemplated that in 1950 the grain harvest would be 127,500,000 tons (a 7% increase over the prewar average), sugar beets 26,000,000 (22% increase), raw cotton 3,100,000 (25% increase) and flax 800,000 tons (39% increase).

INDUSTRY. Almost all industry in the Soviet Union is carried on by organizations owned or controlled by the state. About 80 per cent of the total state industries is controlled by 291 large trusts. The industrialization of the country has been one of the major objectives of its leaders during the past 25 years. The completion of the first two Five-Year Plans (1928-32, 1933-37) and of most of the third (1937-42) saw a great increase in the volume and versatility of Soviet industry.

Unofficial estimates of 1949 placed raw steel production at 22,000,000 metric tons; pig iron, 17,500,000 tons; electricity, 70,000,000,000 kwh.; and cotton cloth (1948) 3,000,000,000 meters.

The large-scale evacuation of plants to the East and the construction of new plants there during World War II, coupled with the eastward orientation of industry prior to the war, has shifted the balance to newly developed regions in Central Asia and Siberia from the Moscow-Leningrad area and the Ukraine. The new regions are now the center of Soviet industrial power, accounting for almost all magnesium and aluminum production, and more than 60 per cent of the pig iron and steel production. The production of consumers' goods continues to be subordinate to the production of heavy capital equipment.

Under the current Five-Year Plan the gross output of Soviet industry in 1950 is fixed at 205,000,000,000 roubles (48% above the prewar level). An increase was planned in the output of pig iron to 19,400,000 tons and of steel to 25,400,000 tons (35% above prewar), involving the construction of 45 additional blast furnaces, 180 open-hearth furnaces, 90 electric furnaces and 104 rolling mills. The plan called for a 100 per cent increase in engineering production and equipment and for an increase of 3.7 times in the metallurgical industries. Even if the 1950 steel target was reached, however, Soviet production would be only on a level equaling that of the U. S. in 1913. The value of capital investments in

the period 1946-50 was fixed at 157,500,000,000 roubles.

According to official Soviet sources, production in the final quarter of 1947 reached the 1940 level, and output in 1949 was 41 per cent above the 1940 level and 86 per cent above that of 1946.

FOURTH FIVE-YEAR PLAN

(Index numbers of industrial production;
1946 = 100)

	1947	1948	1949
Total production	122	155	186
Pig iron	114	139	165
Steel	109	140	175
Coal	112	128	145
Petroleum	119	134	153
Locomotives	277	424	483
Automobiles	130	273	617
Spinning			
machinery	263	539	733
Tractors	209	426	660
Cotton textiles	133	165	188
Leather footwear	140	172	210

FOREIGN TRADE. Soviet foreign trade is a state monopoly, and foreign goods are purchased in accordance with an over-all plan conducted under the supervision of the Foreign Trade Ministry. Connected with the Ministry are a number of export-import and transport combines.

The U.S.S.R. share in world exports (1938) was 1.1 per cent; imports, 1.2 per cent. No later statistics are available. Exports were grain, 21.9 per cent; lumber and timber, 16.8 per cent; furs, 9.9 per cent; petroleum and products, 7.9 per cent; and cotton goods and threads, 4.5 per cent. Imports included machines and industrial equipment, 26.8 per cent; iron and steel, 10.3 per cent; wool, 5.3 per cent; electrical machines and parts, 4.2 per cent; and live animals, 3.7 per cent. From June 22, 1941, until 1945, large supplies were received from Britain and Canada, and from Oct. 1, 1941, until after V-J Day, a total of \$11,141,470,000 in lend-lease assistance came from the U. S.

COMMUNICATIONS. According to Lloyd's Register of Shipping, the merchant marine on June 30, 1949, had 962 ships (over 100 tons) aggregating 2,118,206 tons. Merchant ship construction has been subordinated to naval construction under the fourth Five-Year Plan. The principal ports include Leningrad on the Gulf of Finland, Murmansk and Archangel on the Arctic Ocean and White Sea, respectively; Vladivostok on the Sea of Japan; and the Black Sea ports of Odessa, Sevastopol, Novorossisk and Batum. River and canal transport is extremely important. In 1947 there were about 60,000 miles of navigable rivers and canals.

Railway mileage (1945) totaled 66,000, of which about 30 per cent was double-tracked. Freight traffic reached 569,117,-

490 tons and 1,777,800,000 passengers were carried in 1938. Highway mileage (1945) totaled 849,520, but only 7,146 mi. (less than in Vermont) were reported as all-weather roads in 1949. Under the latest Five-Year Plan, war-devastated railway lines were rebuilt and another 4,510 miles were to be constructed, including 3,310 miles in Siberia.

Air traffic is assuming great importance, especially in the central Asiatic portion of the U.S.S.R. Prior to World War II, the network of air routes covered 69,845 miles; in 1949 the estimated length was 109,000 miles, over which some 2,000,000 passengers were carried (300,000 in 1938). Moscow is connected with the capitals of all the Union republics by daily air service, and there are regular services to the Far East and Europe. No foreign air routes have been allowed to enter the U.S.S.R.

FINANCE. Recent financial data are as follows, in billions of roubles:

	1948	1949*	1950*
Revenue	408.4	445.2	432.0
Expenditure	368.8	415.4	427.9

* Budget estimate.

The budget includes charges for the financing of industry, transportation, agriculture and commerce—items which ordinarily are handled through private channels in other countries. The internal debt in 1939 amounted to \$2,667,369,471.

MINERALS. The U.S.S.R. is probably the richest country in the world in mineral resources, containing deposits of almost every known mineral. It ranks fourth in coal production, second in chromite, second in iron ore, third in petroleum, second in gold, and retains high rank in the production of numerous others. The richest mineral region is that of the Ural Mountains, which lacks only good coking coal. Total coal production in 1948 was estimated at 220,000,000 short tons. Other production estimates included aluminum (1948) 140,000 metric tons; copper (1949) 225,000 tons; lead (1949) 155,000 tons; platinum (1948) 125,000 oz.; tin (1949) 9,000 tons; zinc (1949) 170,000 tons; gold (1948) 7,000,000 oz. Petroleum production was estimated at 250,000,000 bbl. in 1949, including eastern Poland and Sakhalin. Uranium deposits are believed to exist in the U.S.S.R.

FORESTS. With a forested area of about 2,346,000,000 acres, the U.S.S.R. possesses a large proportion of the world's timber reserves. Most of the forested area is in Siberia, but there are also valuable stands in the Caucasus. Plans were made late in 1948 for the planting of huge forest belts 60 to 90 mi. wide in the southern steppes to protect fertile food-producing areas from the dry winds of the central Asian and Caspian deserts.

FISHERIES AND FURS. The rivers, lakes and surrounding seas (except the Black Sea) are rich in fish; the catch averages more than 1,500,000 tons annually. The acquisition of former Japanese fisheries in Karafuto and the Kuriles will double the output of the Far Eastern fish industry. Trapping is an important secondary industry, especially in eastern Siberia.

TOPOGRAPHY. The U.S.S.R. is the largest unbroken political unit in the world, occupying more than one-seventh of the land surface of the globe. The greater part of its territory is a vast plain stretching from eastern Europe to the Pacific Ocean. This plain, relieved only occasionally by low mountain ranges (notably the Urals), consists of three zones running east and west: (1) the frozen marshy tundra of the Arctic; (2) the more temperate forest belt; and (3) the steppes or prairies to the south, which in southern Soviet Asia become sandy deserts. The topography is more varied in the South, particularly in the Caucasus between the Caspian and Black Seas, and in the Tien-Pamir mountain system bordering Afghanistan, Sinkiang and Mongolia. Mountains (Stanovoi and Kolyma) and great rivers (Amur, Yenisei, Lena) also break up the sweep of the plain in Siberia.

CLIMATE. The climate necessarily is varied, but for the most part is continental. In general the climate of the northern and central regions is characterized by long, cold winters and by summers which are shorter and cooler than those in the northern part of the United States. Siberia has the coldest winters in the world; the January average at Verkhoyansk is -59° . In the southern regions the climate varies between temperate and subtropical. The Uzbek, Turkmen and Kazakh S.S.R.'s are largely desert and semi-desert areas. In the central belt rainfall is fairly uniform, averaging about 15 inches east of the Urals and 20 inches to the west. In the tundra to the north it drops to about 8 inches and to 4 inches in the southern regions.

Average daily low temperature at Moscow is about 5° (high, 14°) in January, the coldest month; average daily high is 71° during July, the warmest month.

Uruguay (Republic)

(República Oriental del Uruguay)

Area: 72,172 square miles.

Population (est. 1949): 2,650,000 (white, 86%; mestizo, 12%; Indian, 2%).

Density per square mile: 36.7.

President: Luis Batlle Berres.

Principal cities (est. 1948): Montevideo, 850,000 (capital); Paysandú, 50,000 (meat

packing); Salto, 48,000 (cattle raising); Mercedes, 33,000 (farming center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Uruguay, a little larger than North Dakota, has many distinctions. It is the smallest and most densely populated of the sovereign South American nations. It has one of the highest proportions of white population and one of the lowest illiteracy rates in all Latin America. Despite constant pressure from Argentina, and some concessions to that powerful neighbor, Uruguay has managed to remain one of the most democratic and progressive of Latin American states.

Juan Díaz de Solís, a Spaniard, discovered Uruguay in 1516, but the Portuguese were first to settle it when they founded Colonia in 1680. After a long struggle, Spain wrested the country from Portugal in 1778. Uruguay revolted against Spain in 1811, only to be conquered in 1816-20 by the Portuguese from Brazil. Independence was re-asserted with Argentine help in 1825, and the republic was set up in 1830. There followed a long period of factional strife between two groups still in existence at the present time—the Blancos and the Colorados. President José Batlle y Ordóñez launched a series of social reforms in 1911-15 which started Uruguay on its modern career of democracy, although Gabriel Terra, elected president in 1931, seized dictatorial power and modified the constitution to permit his re-election.

Terra was succeeded in 1938 by Alfredo Baldomir and, in 1943, by Juan José de Amézaga, both of whom worked closely with the U. S. on global and hemispheric policy. In 1946, Tomás Berreta was elected president; he took office March 1, 1947 for a four-year term and was replaced after his death on Aug. 2, 1947, by Luis Batlle Berres.

GOVERNMENT AND DEFENSE. Under the 1936 constitution, Uruguay elects every four years a president, a vice president, a cabinet and a two-house congress—a 99-member Chamber of Deputies and a 30-member Senate. The cabinet and congress are chosen by proportional representation. All literate citizens may vote, including women, who may also sit in congress.

Service in the army (1950 strength: 26,000) is voluntary, but national guard service is compulsory in wartime. There is a police force of about 5,500, and a small air force. The navy had a 1,150-ton sloop, a surveying vessel and several smaller craft on Jan. 1, 1949.

SOCIAL AND ECONOMIC CONDITIONS. Uruguay's illiteracy rate is 35 per cent; primary education is compulsory, and all education is free. There were in 1947 a

total of 192,804 pupils in 1,635 public schools, and 20,000 (1943) in the university at Montevideo. Uruguay's high percentage of white population includes many foreign-born, mostly Italian and Spanish, but some Brazilian, Argentine and French.

Cattle, sheep, meat and wool dominate the Uruguayan economy. With nearly 80 per cent of its grassy land devoted to grazing, there were in 1948, 23,000,000 sheep and (1946) 6,821,000 cattle. The 1949 wool clip was about 70,000 metric tons. With only about 5 per cent of the land cultivated, a third of this grows wheat, the chief crop (1949-50: 429,000 metric tons). Other crops are corn, flax for linseed, oats, potatoes, beans, fruits, tobacco, alfalfa and grapes. Wine production in 1949 was about 20,000,000 gallons.

Uruguay slaughters more than two million head of cattle and sheep a year, and meat processing is the largest manufacturing industry. There are many modern plants for chilling or freezing meat, and plants for preparation of liquid extract of beef.

During World War II Uruguay doubled its foreign trade, and most of the increase went to the U. S. Exports in 1949 were \$191,700,000; imports, \$181,700,000. In value, wool was the chief export (35%), followed by agricultural products (25%) and hides (15%). Chief customers were the U. S. (26%), Britain (22%) and Germany (11%). Leading imports include machinery, vehicles, gasoline and sugar. Britain (23%) and the U. S. (21%) were the principal suppliers in 1949.

Steamers of 14-foot draft can travel half-way up the Uruguay River border, and smaller craft can go nearly the length of that border. The Río Negro is navigable only in its lower course. Railway mileage in 1949 totaled 1,874. Prior to 1948, 90 per cent was British-owned, but in that year the government purchased complete interest. Road mileage was 26,000 in 1948, of which 3,051 mi. were paved.

The 1949 budget estimated revenue at 204,464,802 pesos and expenditure at 223,250,588 pesos. The funded public debt on Dec. 31, 1948, was 760,200,000 pesos.

Minerals are of slight importance. In the north, some gold is mined and there are small deposits of silver, lead, copper, talc and lignite.

TOPOGRAPHY AND CLIMATE. Uruguay, a low rolling plain in the south and a low plateau in the north, has a 120-mile Atlantic shore line, a 235-mile frontage on the Río de la Plata, and 270 miles on the Uruguay River, its western boundary. The climate is good. Average summer temperature in January and February is 71°, and average winter temperature in July is 50°. Frost is almost unknown. Average rainfall is 35 inches, heaviest in the autumn.

Vatican City State

(Stato Città Vaticana)

Area: 108.7 acres.

Population (est. 1948): 800 (Italian, 85%; Swiss and others, 15%).

Ruler: The Supreme Pontiff, Pius XII.

Monetary unit: Lira.

Languages: Latin, Italian.

Religion: Roman Catholic.

The Vatican City State, sovereign and independent, is situated on the Vatican hill on the right bank of the Tiber in northwest Rome. The area has been intimately associated with the history of the Roman Catholic Church since the time of the martyrdom of St. Peter. From it the Pope exercised temporal sway for many centuries over a large part of central Italy; in 1859 the Papal States comprised an area of some 17,000 square miles. During the struggle for Italian unification (1860-70), most of this area became part of the Kingdom of Italy.

By an Italian law of May 13, 1871, the temporal power of the Pope was abrogated, and the territory of the Papacy was confined to the Vatican and Lateran palaces and the Villa of Castel Gandolfo. The Popes consistently refused to recognize this arrangement, and by the Lateran Treaty of Feb. 11, 1929, between the Vatican and the Kingdom of Italy, the exclusive dominion and sovereign jurisdiction of the Holy See over the city of the Vatican was again recognized, thus restoring the Pope's temporal authority over the area. Accompanying the treaty were conventions regulating the position of the Catholic Church in Italy and providing for reimbursement to the Vatican in final settlement of the claims of the Holy See against Italy for the loss of temporal power in 1870-71.

The Supreme Pontiff is Pius XII (Eugenio Pacelli), born at Rome, March 2, 1876, proclaimed cardinal in 1929, and elected Pope on March 2, 1939.

The Pope has full legal, executive and judicial powers. Executive power over the area is in the hands of a governor appointed by the Pope and exclusively responsible to him.

The College of Cardinals is the Pope's chief advisory body, and upon his death the cardinals elect his successor for life. The cardinals themselves are created for life by the Pope. When complete, the College consists of 70 members: 6 Cardinal-Bishops, 50 Cardinal-Priests, and 14 Cardinal-Deacons.

The central administration of the Roman Catholic Church throughout the world is carried on in the Vatican by 12 congregations, 3 tribunals and 5 offices.

In its diplomatic relations with foreign countries, the Vatican is represented by

the Papal Secretary of State. In 1949 the Vatican maintained diplomatic relations with 42 states through its papal-nuncios (ambassadors) and inter-nuncios (ministers). Apostolic Delegates, representatives without accredited rank, are maintained in a number of other countries.

The Vatican has its own railway station, postal facilities, coinage, newspaper, radio and television system. In addition to the Vatican itself, which includes St. Peter's Square, extraterritorial rights are enjoyed in 13 buildings in the city of Rome outside Vatican City.

Venezuela (Republic)

(Estados Unidos de Venezuela)

Area: 352,143 square miles.

Population (est. 1949): 4,596,000 (mestizo, 65%; white, 20%; Negro, 8%; Indian, 7%).

Density per square mile: 13.1.

Executive: Military junta headed by Carlos Delgado Chabaud.

Principal cities (est. 1947): Caracas, 342,921 (capital); Maracaibo, 131,989 (oil); Barquisimeto, 74,139 (coffee, sugar, mining); Valencia, 59,251 (farming center).

Monetary unit: Bolívar.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Venezuela, a third larger than Texas, has a stormy political past and the distinction of being the world's second greatest producer of oil, outranked only by the U. S. In South America it is the sixth country in size and the only independent country lying entirely north of the equator. Simón Bolívar, who led the liberation of much of the continent from Spain, was born in Caracas.

Columbus discovered Venezuela on his third voyage in 1498. A subsequent Spanish explorer, for reasons of his own, gave the country its name, meaning "Little Venice." There were no important settlements until Caracas was founded in 1567. With Bolívar taking part, Venezuela was one of the first South American colonies to revolt against Spain in 1810, but it was not until 1821 that independence was won. Federated at first with Colombia and Ecuador, the country set up a republic in 1830, and then sank for many decades into a condition of revolt, dictatorship and corruption climaxed by the ironhand regime of Antonio Guzmán Blanco from 1870 to 1889. The U. S. intervened in 1895 to force an arbitration between Great Britain and Venezuela in a dispute over the boundary with British Guiana. From 1908 to 1935, when he died, General Juan Vicente Gómez ruled tyrannically over the nation, picking various satellites to alternate with him in the presidential palace. He was succeeded in 1936 by General Eleazar López

pez Contreras. The president during World War II, General Isaías Medina Angarita, co-operated with the U. S. but permitted such political freedom that he was overthrown on Oct. 19, 1945.

Out of that revolt, militarist in nature, the Socialist leader Dr. Rómulo Betancourt emerged as provisional president, and his government received U. S. recognition on Oct. 30, 1945. Betancourt's party, the liberal Acción Democrática, won 137 out of 160 seats in an election held Oct. 27, 1946, for a Constituent Assembly to draft a new constitution. The well-known writer, Rómulo Gallegos, easily won the presidential election of Dec. 14, 1947, as the candidate of Acción Democrática. The latter party also won 83 of the 110 seats in the chamber of deputies.

Venezuela's brief experience with democracy was abruptly ended on Nov. 24, 1948, however, by an army-led conservative coup which ousted Gallegos.

GOVERNMENT AND DEFENSE. Venezuela is a union of 20 states, a federal district and two territories. Before November, 1948, Congress had a 46-member senate and a 110-member chamber of deputies, both elected directly. Under the constitution promulgated July 5, 1947, the president was elected by popular vote for five years and could not succeed himself. The constitution (Venezuela's 20th) established comprehensive political and social rights, including woman suffrage.

Military service is compulsory, with a one- to three-year initial training period. The army has about 10,000 men. The navy has several gunboats, corvettes, and other minor craft. There is a small air force.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy in 1949 was estimated at 60 per cent. Primary education between ages of 7 and 14 is compulsory. School enrollment in 1947-48 exceeded 350,000 in 4,951 primary schools and 132 secondary schools. There are three universities—Los Andes at Mérida, Central University at Caracas, and Zulia at Maracaibo.

Agriculture engages the majority of the population, but production has failed to keep pace with the food needs of the rapidly increasing population. The principal crop is coffee, grown on 60,000 plantations on the slopes of the coastal mountains. Annual production averages 1,000,000 bags of 60 kilograms each. Exports of cacao in 1949 were 13,598 tons. Other important crops are sugar, tobacco, cotton, corn, wheat and tropical fruits. Stockraising, centered east of Lake Maracaibo, and on the llanos, is important. Estimates in 1945: 4,000,000 cattle, 750,000 calves, 60,000 sheep and lambs, and 1,400,000 goats and kids.

There are few industries, the most important being woodworking, cotton textiles and tobacco products. Electric power is

plentiful, and a law of 1943 prepared the way for the beginning of an oil refining industry. The 11 oil refineries and topping plants in 1949 had an output of over 50,000,000 bbl. In 1949, 1,898,480,000 cigarettes and 299,723 metric tons of cement were produced.

Oil, most of which is found on the northwest shore of Lake Maracaibo, is by far the dominant factor in the economy. It accounts for 95 per cent of exports, gives the country a big foreign trade balance and a treasury surplus. Recent foreign trade statistics, in millions of bolívars:

	1947	1948	1949
Exports	2,168	3,484	3,360
Imports	1,870	2,300	2,241

In 1949 the U. S. supplied 74 per cent of the imports; Britain, 8 per cent. Leading imports were machinery and equipment, metals and manufactures, foodstuffs, beverages and textiles. In addition to petroleum (97%), the chief exports were coffee and cacao. Most of the oil goes to the U. S. via the islands of Curaçao and Aruba, refining centers in the West Indies. In 1949, those islands took 56 per cent of the exports; the U. S., 29 per cent.

Highways include 3,829 miles for all-weather use, and 1,600 miles of unimproved road. Railway mileage is about 685, largely in unconnected short lines, ten national and two British-owned. There is an extensive air service. La Guaira and Puerto Cabello are the chief seaports. Navigable rivers total 6,500 miles. Most of the tonnage sent along the Orinoco—navigable for 700 miles for river steamers of 12-foot draft—is transhipped at Port of Spain, Trinidad.

The 1949-50 budget, as amended to Dec. 31, 1949, estimated expenditure at 1,739,275,126 bolívars (actual expenditure 1948-49: 1,933,525,749 bolívars; revenue: 1,958,356,771 bolívars). There is no foreign debt. Venezuela's excellent financial position is largely due to its revenue from taxes on oil and other minerals.

Oil production increased from 116,000,000 barrels in 1931 to 490,015,593 in 1948, dropping slightly to 482,280,987 in 1949. In addition to oil, Venezuela has gold mines in the region southwest of the Orinoco delta. Output in 1949 was 61,177 troy oz. Of minor importance are bauxite, coal, copper, tin, asbestos and asphalt. Diamond production in 1949 was 56,655 carats. A subsidiary of Bethlehem Steel Corp. began the mining of iron ore in the El Pao area south of the Orinoco river in 1950, while a U. S. Steel Corp. subsidiary went ahead with preliminary development operations on a rich "iron mountain" south of Ciudad Bolívar on the Orinoco.

Much of the country is covered by forests still barely exploited, particularly

south of the Orinoco. One of the oldest industries is the pearl fisheries off Margarita, Coche and Cubagua islands.

TOPOGRAPHY AND CLIMATE. An unusual setting of mountain systems breaks Venezuela into four distinct areas: (1) the Maracaibo lowlands; (2) the mountainous region in the north and northwest; (3) the Orinoco basin with the llanos (vast grass-covered plains) on its northern border and great forest areas in the south and southeast; (4) the Guiana highland, south of the Orinoco, accounting for nearly half the national territory. About 80 per cent of Venezuela is drained by the Orinoco and its 400 tributaries. The coast line, 1,876 miles long, is indented in the northwest by the Gulf of Maracaibo. A narrow channel joins the gulf to Lake Maracaibo, which is nearly the size of Lake Ontario.

The climate is tropical and unhealthy except where modified by altitude; it approaches the mild temperate in the higher western mountains. Most rainfall occurs between April and October, and the rest of the year is dry. At La Guaira, the mean annual temperature is 81°, at Caracas, 70°, at Cumaná, 83°.

Yugoslavia (Republic) (Federaciona Narodna Republika Jugoslavija)

Area: 99,044 square miles.*

Population (census 1948): 15,751,953 (1931: Serbian, 46%; Croat, 28.5%; Slovene, 8.5%; German, 3.6%; others [Magyar, Albanian, Rumanian, Czech], 13.4%).

Density per square mile: 159.0.*

Chairman of Presidium of National Assembly: Ivan Ribar.

Prime Minister: Josip Broz (Tito).

Principal cities (census 1948): Belgrade (Beograd), 388,246 (capital); Zagreb, 290,417 (Croat commercial center); Ljubljana, 120,944 (Slovenian industrial center); Sarajevo, 118,158 (Bosnian manufacturing center); Subotica, 112,551 (wheat, livestock).

Monetary unit: Dinar.

Languages: Serbo-Croat, Slovene, Macedonian (all official).

Religions (1931): Serbian-Orthodox, 48.7%; Roman Catholic, 37.45%; Mohammedan, 11.2%; Protestant, 1.66%; Jewish, .49%; Greek Catholic, .32%; others, .18%.

* Including 1947 treaty awards.

HISTORY. Yugoslavia, twice the size of Pennsylvania and fronting on the Adriatic Sea opposite Italy, was formed in 1919 out of some of Europe's oldest trouble spots in the Balkans. After a brief and unstable history of 25 years, it emerged from World War II as a Russian satellite. World amazement, however, followed an attack made June 28, 1948, by the Soviet-dominated Cominform on Marshal Tito and the

Yugoslav Communist party for inspiring a "hateful" policy against the Soviet Union and retreating from the Communist line in foreign and domestic policies. Unlike other officials similarly attacked by Soviet organs in the past, Tito denounced the Cominform's action and still continued in full power despite further repeated attacks by the Cominform and members of the Soviet east European bloc in 1948-50. On Sept. 29, 1949, the Soviet Union denounced its 1945 treaty of friendship with Yugoslavia.

The 1919 components of Yugoslavia were the old kingdoms of Serbia and Montenegro, and the following: Bosnia-Herzegovina, formerly administered jointly by Austria and Hungary; Croatia-Slavonia, which had had limited autonomy under Hungary; and Slovenia and Dalmatia, formerly administered by Austria.

Alexander I, son of King Peter of Serbia, became the first king of the new country on Aug. 16, 1921. His reign was a rocky one because the Croats, under Dr. Stephen Radić, unceasingly sought autonomy. Finally, a Croat assassinated Alexander in Marseille in Oct., 1934, and since his son Peter was a minor, a regency was set up under Prince Paul, the new king's uncle.

After pursuing an increasingly pro-Axis policy under the regent, Yugoslavia signed the Axis Pact on March 25, 1941; this caused the overthrow of the government two days later. On April 6 the country was invaded by the Nazis and was speedily occupied. While the king and government fled to the Near East and later to London, Yugoslavia was divided into German, Italian, Hungarian and Bulgarian occupation zones. Puppet regimes were established in Croatia and Serbia.

Inside Yugoslavia, the Axis occupation was fought by two guerrilla armies—the Chetniks under Draja Mihailović, who supported the monarchy; and the Partisans under Marshal Tito (Josip Broz), who leaned toward Russia. These two groups fought not only the Germans, but also each other. In Nov., 1943, Tito established an Executive National Committee of Liberation to act as a provisional government, thus repudiating King Peter in exile.

In the elections of Nov. 11, 1945, Tito's forces won overwhelmingly, partly because the monarchist factions boycotted the balloting. Convening on Nov. 29, the new Assembly abolished monarchy and set up the Federal People's Republic of Yugoslavia. Tito was prime minister, and his government won British and U. S. recognition.

The Tito government embarked upon an internal policy of ruthless oppression and elimination of opposition factions, including the summary trial and execution of Mihailović in 1946. In April, 1947, it initiated a five-year plan aimed at improve-

ment of agriculture and heavy expansion of industry. Conflict soon arose within the government as to the rate at which socialization should be pushed, and the dismissal in May, 1948, of officials favoring an intensified program led in part to the Cominform blast at Tito in June.

Externally the government pursued, until 1948, its uncompromising support of Moscow, as manifested by Yugoslav aid to anti-government Greek guerrillas, which had led to a U. N. inquiry in 1947. Soviet support enabled the nation to secure most of Italian Istria under the 1947 peace treaty, but efforts to secure sovereignty over the key port of Trieste were unsuccessful.

GOVERNMENT AND DEFENSE. The constitution of Jan. 31, 1946, is derived from Moscow. There is a federal assembly with one representative for each 50,000 electors in the country. There is a "house of the peoples" in which the six federal units—Serbia, Croatia, Slovenia, Bosnia-Herzegovina, Macedonia and Montenegro—each have 25 representatives, while three other areas have a total of 25. The presidium, a joint committee of both houses, carries on when parliament is out of session, but actual control of the country is in the hands of the Yugoslav Communist Party.

The army, based upon the National Liberation Army and partisan detachments which at one time had a strength of about 800,000, was unofficially estimated to number from 300,000 to 400,000 in 1948, including police forces. Equipment generally is poor. The air force had about 1,500 planes in 1949. The navy was believed to include 7 submarines and 3 escort destroyers on Jan. 1, 1950. It received several small ships from the Italian fleet in 1948.

SOCIAL AND ECONOMIC CONDITIONS. Education on the elementary level is compulsory and free. In 1947-48, there were 12,052 elementary schools with 1,616,002 pupils, 942 secondary schools with 310,185 students, and 1,307 technical schools with 121,137 students. The various universities and technical colleges had a total enrollment of 43,625.

Agriculture occupies about 80 per cent of the population. The principal crops are corn, wheat, sugar beets, hemp, hops, opium (in Macedonia) and tobacco (chiefly in Macedonia and Herzegovina). Wheat production in 1949 was 2,600,000 metric tons. Other important crops are barley, beans, potatoes, flax, clover and lucerne. Excellent wines are produced in Dalmatia and Herzegovina and along the Danube. The fruit industry is important, especially in Serbia and Bosnia.

Manufactures are limited for the most part to consumers' goods. Legislation

passed Dec. 5, 1946, nationalized all private economic enterprises, public works and industries in 42 branches of the national economy including mining, metallurgy, all industries processing natural products, food processing, beverages, building, transportation, and all land, sea and air communications.

Yugoslavia has only limited access to ports on the Adriatic because of the difficulty in crossing the coastal range with railways and highways. Waterways, especially the Danube, are important. The merchant marine in 1948 totaled 103 vessels (of over 100 tons) with a gross tonnage of 202,615. Railway mileage in 1947 totaled 6,717, mostly state-owned. Main highway mileage was 20,646.

Exports in 1949 were reported to be 9,790,000,000 dinars; imports, 14,880,000,000 dinars. Faced with a virtual boycott imposed by the Cominform, Yugoslavia began in 1949 to turn to the West for foreign trade possibilities.

The 1949 budget balanced with estimated revenues and expenditures of 161,952,598,000 dinars. Of the expenditures, 77,400,000,000 dinars were earmarked for capital constructions investments and the raising of social standards. The 1950 budget was balanced at 173,746,000,000 dinars, the increase over 1949 being attributed to military expenditures.

Yugoslavia is the Balkans' principal mineral producer. Production has been as follows in recent years, in short tons: copper (1947) 30,000, bauxite (1945) 165,000, chromite (1943) 71,500, lead (1947) 50,000, iron ore (1941) 550,000, coal (1941) 8,030,000. Few postwar production figures have been released. Many rushing mountain streams make a high potential of hydroelectric power, used frequently in the development of mining.

Forests cover about 30 per cent of the country, with beech, fir and oak common.

TOPOGRAPHY AND CLIMATE. About half of Yugoslavia is mountainous. In the north, the Dinaric Alps rise abruptly from the sea and progress eastward as a barren limestone plateau called the Karst. Montenegro is a jumbled mass of mountains, containing also some grassy slopes and fertile river valleys. Southern Serbia, too, is mountainous. A rich plain in the north and northeast, drained by the Danube, is the most fertile area of the country.

The Danube and tributaries—the Drava, Sava and Morava—in the northeast are the principal rivers. On the Adriatic, Yugoslavia's climate is mild and Mediterranean, but in the interior the winters are cold and the summers hot. January temperatures in Belgrade average about 30°, and summer temperatures are usually in the 70's. Rainfall is heaviest throughout the country from October to January.

Largest Cities of the World

(Exact rating of the cities of the world according to size is impossible because of the diversity of the years for which census or estimated population figures have been issued. Therefore, the rating shown in this table must be considered only approximate.)

City and country	Population	Year*	City and country	Population	Year*
1. London (Greater), England.....	8,390,941	1949E	11. Rio de Janeiro, Brazil.....	2,129,648	1949E
2. New York, N. Y., U.S.A.....	7,835,099†	1950C	12. Calcutta, India.....	2,108,891	1941C
3. Shanghai, China.....	4,630,385	1948E	13. Cairo, Egypt.....	2,100,506	1947C
4. Tokyo, Japan.....	4,174,505	1947E	14. Philadelphia, Pa., U.S.A.....	2,064,794†	1950C
5. Moscow, U.S.S.R.....	4,137,018	1939C	15. Mexico City, Mexico.....	1,972,351	1948E
6. Berlin, Germany.....	3,729,300	1949E	16. Los Angeles, Calif., U.S.A.....	1,957,692†	1950C
7. Chicago, Ill., U.S.A.....	3,606,436†	1950C	17. Detroit, Mich., U.S.A.....	1,838,517†	1950C
8. Leningrad, U.S.S.R.....	3,191,304	1939C	18. Tientsin, China.....	1,772,840	1948E
9. Buenos Aires, Argentina.....	3,000,371	1947C	19. Vienna, Austria.....	1,750,000	1948E
10. Paris, France.....	2,800,000	1948E	20. Peiping, China.....	1,721,546	1948E

Other Large Foreign Cities

(over 500,000)

City and country	Population	Year*	City and country	Population	Year*
Ahmedabad, India.....	591,267	1941C	Lepzig, East Germany.....	608,111	1946C
Alexandria, Egypt.....	925,081	1947C	Liège, Belgium.....	573,176	1948E
Amsterdam, Netherlands.....	835,834	1950E	Lima, Peru.....	800,460	1949E
Antwerp, Belgium.....	794,280	1948E	Lisbon, Portugal.....	796,227	1948E
Baghdad, Iraq.....	832,927	1946E	Liverpool, England.....	767,990	1948E
Baku, U.S.S.R.....	809,347	1939C	Łódź, Poland.....	576,000	1948E
Bangkok, Thailand.....	827,290	1947C	Madras, India.....	777,481	1941C
Barcelona, Spain.....	1,500,000	1949E	Madrid, Spain.....	1,440,041	1949E
Birmingham, England.....	1,099,850	1948E	Manchester, England.....	697,540	1948E
Bogotá, Colombia.....	543,590	1950E	Manila, Philippines.....	983,906	1948C
Bombay, India.....	1,489,883	1941C	Marseille, France.....	700,000	1948E
Brussels, Belgium.....	1,296,687	1948E	Melbourne, Australia.....	1,226,923	1947C
Bucharest, Rumania.....	1,401,807	1948C	Milan, Italy.....	1,277,013	1948E
Budapest, Hungary.....	1,058,288	1948C	Montevideo, Uruguay.....	850,000	1948E
Canton, China.....	1,128,165	1948E	Montreal, Canada.....	1,420,057	1949E
Casablanca, French Morocco.....	550,000	1947E	Mukden, Manchuria.....	1,021,057	1948E
Changchun, Manchuria.....	c. 500,000	1948E	Munich, West Germany.....	738,018	1946C
Changsha, China.....	606,972	1931E	Nagoya, Japan.....	853,085	1947E
Chungking, China.....	985,673	1948E	Nanking, China.....	1,113,972	1948E
Chieng Mai, Thailand.....	534,623	1947C	Naples, Italy.....	995,257	1948E
Copenhagen, Denmark.....	764,999	1950E	Odessa, U.S.S.R.....	604,223	1939C
Dairen, Kwantung.....	543,690	1948E	Osaka, Japan.....	1,559,310	1947E
Delhi, India.....	521,849	1941C	Prague, Czechoslovakia.....	932,024	1948E
Dnepropetrovsk, U.S.S.R.....	500,662	1939C	Rangoon, Burma.....	501,219	1942E
Dublin, Ireland.....	506,635	1946C	Rome, Italy.....	1,613,660	1948E
Essen, West Germany.....	520,592	1946C	Rostov on Don, U.S.S.R.....	510,253	1939C
Genoa, Italy.....	657,634	1948E	Rotterdam, Netherlands.....	675,905	1950E
Glasgow, Scotland.....	1,106,000	1947E	Santiago, Chile.....	1,161,633	1949E
Gorki, U.S.S.R.....	644,116	1939C	São Paulo, Brazil.....	1,514,241	1946E
Hague, The, Netherlands.....	558,849	1950E	Seoul, Korea.....	1,446,049	1949E
Hamburg, West Germany.....	1,406,158	1946C	Sheffield, England.....	512,110	1948E
Hangchow, China.....	506,930	1931E	Sian, China.....	628,499	1948E
Hankow, China.....	721,598	1948E	Stockholm, Sweden.....	733,615	1949E
Harbin, Manchuria.....	760,000	1948E	Sydney, Australia.....	1,484,434	1947C
Havana, Cuba.....	659,883	1943C	Tashkent, U.S.S.R.....	585,005	1939C
Hyderabad, India.....	739,159	1941C	Teheran, Iran.....	850,000	1948E
Istanbul, Turkey.....	845,316	1945C	Tiflis, U.S.S.R.....	519,175	1939C
Jakarta, Indonesia.....	1,200,000	1949E	Toronto, Canada.....	673,104	1949E
Johannesburg, U. of So. Af.....	727,743	1946C	Tsingtao, China.....	850,308	1948E
Kharkov, U.S.S.R.....	833,432	1939C	Turin, Italy.....	719,528	1948E
Khonkaen, Thailand.....	590,664	1947C	Valencia, Spain.....	592,687	1948E
Kiev, U.S.S.R.....	846,293	1939C	Victoria, Hong Kong.....	767,000	1949E
Kobe, Japan.....	607,202	1947E	Warsaw, Poland.....	586,000	1948E
Kyoto, Japan.....	999,396	1947E	Yokohama, Japan.....	814,268	1947E
Lahore, Pakistan.....	671,659	1941C			

* E—Estimated; C—Census. † Preliminary figures.

Explorations and Discoveries

Africa

Country or place	Event	Explorer or discoverer	Date
Sierra Leone	Visited	Hanno, Carthaginian seaman	c. 520 B.C.
Congo River	Mouth discovered	Cão, Portuguese navigator	c. A.D. 1484
Cape of Good Hope	Doubled	Bartholomeu Diaz, Portuguese navigator	1488
Gambia River	Explored	Mungo Park, Scottish explorer	1795
Sahara Desert	Crossed	Denham and Clapperton, English explorers	1822-23
Zambezi River	Discovered	Livingstone, Scottish explorer	1851
Sudan	Explored	Barth, German explorer	1852-55
Victoria Falls	Discovered	Livingstone	1855
Lake Tanganyika	Discovered	Burton and Speke, British explorers	1858
Congo River	Traced	Stanley, British explorer	1877

Asia

Punjab (India)	Visited	Alexander the Great	327 B.C.
China	Visited	Marco Polo, Italian traveler	c. A.D. 1272
Tibet	Visited	Odoric, Italian monk	c. 1325
Southern China	Explored	Conti, Italian adventurer	c. 1440
India	Visited by Cape route	Vasco da Gama, Portuguese navigator	1498
Japan	Visited	St. Francis Xavier of Spain	1549
Arabia	Explored	Niebuhr, German explorer	1762
China	Explored	Richthofen, German scientist	1868
Mongolia	Explored	Przehevsky, Russian explorer	1870-73
Central Asia	Explored	Hedin, Swedish scientist	1890-1908

Europe

Shetland Islands	Visited	Pytheas of Massilia (Marseille)	c. 325 B.C.
North Cape	Rounded	Ottar, Norwegian explorer	c. A.D. 870
Iceland	Colonized	Norwegian noblemen	c. 890-900

North America

Greenland	Colonized	Eric the Red, Norwegian navigator	c. A.D. 985
Labrador; Nova Scotia (?)	Discovered	Leif Ericsson, Norwegian explorer	1000
West Indies	Discovered	Christopher Columbus, Italian navigator	1492
North America	Coast discovered	John Cabot, for British	1497
Pacific Ocean	Discovered	Balboa, Spanish explorer	1513
Florida	Explored	Ponce de León, Spanish explorer	1513
Mexico	Conquered	Cortez, Spanish adventurer	1519
St. Lawrence River	Discovered	Cartier, French navigator	1534
Southwest U. S.	Explored	Coronado, Spanish explorer	1540-42
Colorado River	Discovered	Alarcón, Spanish explorer	1540
Mississippi River	Discovered	Hernando de Soto, Spanish explorer	1541
Frobisher Bay	Discovered	Frobisher, English seaman	1576
Maine Coast	Explored	Champlain, French explorer	1604
Jamestown, Va.	Settled	Smith, English colonist	1607
Hudson River	Explored	Hudson, English navigator	1609
Hudson Bay (Canada)	Discovered	Hudson	1610
Baffin Bay	Discovered	Baffin, English navigator	1616
Lake Michigan	Navigated	Nicolet, French explorer	1634
Arkansas River	Discovered	Marquette and Joliet, French explorers	1673
Mississippi River	Explored	LaSalle, French explorer	1682
Bering Strait	Discovered	Bering, Danish explorer	1728
Alaskan Coast	Sighted	Gvosdeff, Russian sailor	1731
Mackenzie River (Canada)	Discovered	Mackenzie, Scottish-Canadian explorer	1789
Northwest U. S.	Explored	Lewis and Clark	1804-06
Northeast Passage (Arctic Ocean)	Navigated	Nordenskiöld, Swedish explorer	1879
Greenland	Explored	Peary, American explorer	1892
Northwest Passage	Navigated	Amundsen, Norwegian explorer	1906

South America

Country or place	Event	Explorer or discoverer	Date
Continent	Visited	Columbus, Italian navigator	1498
Brazil	Discovered	Cabral, Portuguese explorer	1500
Peru	Conquered	Pizarro, Spanish explorer	1532-33
Amazon River	Explored	Orellana, Spanish explorer	1541
Cape Horn	Discovered	Schouten, Dutch navigator	1615

Oceania

New Guinea	Visited	Menezes, Portuguese explorer	1526
Australia	Visited	Janzs, Dutch explorer	1606
Tasmania	Visited	Tasman, Dutch navigator	1642
Australia	Explored	Sturt, English explorer	1828
Australia	Explored	Burke and Wills, Australian explorers	1861

Arctic, Antarctic and Miscellaneous

Ocean exploration	Expedition	Magellan's ships circumnavigated the globe	1519-22
Spitsbergen (Arctic Europe)	Visited	Barents, Dutch navigator	1596
Antarctic Circle	Crossed	Cook, English navigator	1773
Antarctica	Discovered	Bellingshausen, Russian navigator	1820-21
Antarctica	Explored	Wilkes, American explorer	1840
North Pole	Discovered	Peary, American explorer	1909
South Pole	Discovered	Amundsen, Norwegian explorer	1911

The Seven Wonders of the World

Monuments and works of art which gained pre-eminence during the Alexandrian era.

THE PYRAMIDS OF EGYPT

A group of three pyramids, *Khufu*, *Khafra* and *Menkaura* at Giza, outside modern Cairo, is often called the first wonder of the world; it is also the oldest and only surviving "wonder." The largest pyramid, built by Khufu (Cheops), had an original estimated height of 482 ft. (now approximately 450 ft.). The exact date of its construction is unknown but has been variously estimated as early as 4700 B.C. or as late as 2900 B.C.

HANGING GARDENS OF BABYLON

Often listed as the second wonder, these gardens were supposedly built by Nebuchadnezzar about 600 B.C. to please his queen, Amuhia. They are also associated with the mythical Assyrian Queen, Semiramis. Archeologists surmise that the gardens were laid out atop a vaulted building, with provisions for raising water. The terraces were said to rise from 75 to 300 ft.

The Walls of Babylon, also built by Nebuchadnezzar, are sometimes referred to as the second (or the seventh) wonder instead of the Hanging Gardens.

STATUE OF ZEUS (JUPITER)
AT OLYMPIA

The work of Phidias (5th century B.C.), this colossal figure in gold and ivory was reputedly 40 ft. high. All trace of it is lost, except for reproductions on coins.

TEMPLE OF ARTEMIS (DIANA)
AT EPHEBUS

A beautiful structure, begun about 350 B.C. in honor of a non-Hellenic goddess who later became identified with the Greek goddess of the same name. The temple, with Ionic columns 60 feet high, was destroyed by invading Goths A.D. 262.

MAUSOLEUM AT HALICARNASSUS

This famous monument was erected by Queen Artemisia in memory of her husband, King Mausolus of Caria in Asia Minor, who died in 353 B.C. Some remains of the structure are in the British Museum. This shrine is the source of the modern word "mausoleum."

COLOSSUS AT RHODES

This bronze statue of Helios (Apollo), about 105 ft. high, was the work of the sculptor Chares, who reputedly labored for 12 years before completing it in 280 B.C. It was destroyed during an earthquake in 224 B.C.

PHAROS OF ALEXANDRIA

The seventh wonder was the Pharos (lighthouse) of Alexandria, built by Sosstratus of Cnidus during the 3rd century B.C. on the island of Pharos off the coast of Egypt. It was destroyed by an earthquake in the 13th century.

Population, Land Areas of the World and World Elevations

Area	Estimated population, in thousands	Approximate area, in thousands of sq. mi.	Per cent of total land area	Population density per sq. mi.	Highest	Elevation, feet	Lowest	Dimensions, miles East—West North—South
WORLD	2,341,154	58,088	100.0	40.3	Mt. Everest, Asia, 29,002	Dead Sea, Asia, below sea level	Dead Sea, Asia, 1,290 below sea level	24,902 24,860
ASIA, excluding Asiatic U.S.S.R.; including Philippines and Neth. Indies	1,242,986	10,593	18.2	117.3	Mt. Everest, Tibet-Nepal, 29,002	Dead Sea, Palestine-Jordan, 1,290 below sea level	Dead Sea, Palestine-Jordan, 1,290 below sea level	5,400* 5,300*
AFRICA	187,494	11,596	20.0	16.2	Mt. Kilimanjaro, Tanganyika, 19,565	Qattara Depression, Egypt, 440 below sea level	Qattara Depression, Egypt, 440 below sea level	4,600 5,000
NORTH AMERICA	214,824	9,387	16.2	22.9	Mt. McKinley, Alaska, 20,300	Death Valley, Calif., 275 below sea level	Death Valley, Calif., 275 below sea level	3,200 4,000
SOUTH AMERICA	105,763	6,863	11.8	15.5	Mt. Aconcagua, Argentina, 22,835	Sea level	Sea level	3,200 4,600
ANTARCTICA	Uninhabited	6,000	10.3		Mt. Thorvald, Nilson, 15,400	Sea level	Sea level	3,300† 2,400†
EUROPE, including Iceland; excluding European U.S.S.R.	385,390	1,908	3.3	202.0	Mt. Blanc, France, 15,781	Sea level	Sea level	2,400 1,900
AUSTRALIA	7,581	2,975	5.1	2.5	Mt. Kosciuszko, 7,328	Lake Eyre, 38 below sea level	Lake Eyre, 38 below sea level	2,400 1,900
OCEANIA, including New Zealand and British, U. S., French, and Australian territories, possessions, etc.	4,116	330	.6	12.4	Mauna Kea, Hawaii, 13,784	Sea level	Sea level	
U.S.S.R.	193,000	8,436	14.5	22.9	Mt. Pobedy, 24,409	Caspian Sea, 86 below sea level	Caspian Sea, 86 below sea level	5,000 2,500

* Including Asiatic U.S.S.R. † Including European U.S.S.R.

HIGH POPULATION DENSITIES
(per square mile)

	35,593.2	Belgium	731.9	United Kingdom	541.1	Italy	395.8
Monaco	35,593.2	Belgium	731.9	United Kingdom	541.1	Italy	395.8
Trieste	1,177.5	Tangier	646.5	Germany	482.2	Lebanon	358.7
Netherlands	801.9	Japan	562.2	Vatican City	470.6	Korea	343.1

Representative Mountain Peaks of the World

Mountain peak	Range	Location	Height, feet
Everest	Himalayas	Tibet-Nepal	*29,002
Godwin Austen (K2)	Himalayas	Union of India	28,250
Kanchenjunga	Himalayas	Nepal	28,140
Gurla Mandhata	Himalayas	Tibet	25,355
Tirich Mir	Hindu Kush	Pakistan	25,230
Minya Konka	.....	China	24,606
Muztagh Ata	Pamirs	Sinkiang	24,388
Chumalhari	Himalayas	Tibet-Bhutan	23,997
Muztagh (K5)	Kunlun	Sinkiang	23,890
Trisul	Himalayas	Union of India	23,360
Aconcagua	Andes	Argentina	22,835
Ojos del Salado	Andes	Argentina-Chile	22,408
Huascarán	Andes	Peru	22,205
Kailas	Himalayas	Tibet	22,028
Llullaillaco	Andes	Argentina-Chile	22,014
Mercedario	Andes	Argentina	21,883
Tupungato	Andes	Argentina-Chile	21,489
Sajama	Andes	Bolivia	21,391
Chimborazo	Andes	Ecuador	20,577
McKinley	Alaska	Alaska	20,300
Logan	St. Elias	Canada (Yukon Territory)	19,850
Kilimanjaro	.....	Tanganyika	19,565
Cotopaxi	Andes	Ecuador	19,344
Misti	Andes	Peru	19,167
Cayambe	Andes	Ecuador	19,016
Orizaba (Citlaltepetl)	Sierra Madre Oriental	Mexico	18,696
Elbrus	Caucasus	U.S.S.R.	18,468
St. Elias	St. Elias	Alaska-Canada	18,008
Vilcanota	Andes	Peru	17,998
Popocatepetl	Cordillera de Anáhuac	Mexico	17,883
Cerro de Cuz	Andes	Bolivia	17,828
Ixtaccihuatl	Cordillera de Anáhuac	Mexico	17,338
Tollma	Andes	Colombia	17,109
Dikh-Tau	Caucasus	U.S.S.R.	17,054
Kenya	.....	Kenya	17,040
Ruvenzori	Ruvenzori	Belgian Congo-Uganda	16,795
Kazbek	Caucasus	U.S.S.R.	16,545
Bona	St. Elias	Alaska	16,420
Klyuchevskaya	Kamchatka	U.S.S.R.	15,912
Savalan	Elburz	Iran	15,784
Blanc	Alps	France	15,781
Fairweather	St. Elias	Alaska	15,287
Dashan	Simen	Ethiopia	15,158
Markham	.....	Antarctica	15,102
Matterhorn	Alps	Switzerland	14,780
Whitney	Sierra Nevada	California	14,495
Elbert	Rockies	Colorado	14,431
Rainier	Cascades	Washington	14,408
Longs Peak	Rockies	Colorado	14,255
Collma	Sierra Madre Occidental	Mexico	14,239
Shasta	Sierra Nevada	California	14,161
Pikes Peak	Rockies	Colorado	14,110
Finsteraarhorn	Alps	Switzerland	14,026
Gannett Peak	Rockies	Wyoming	13,785
Mauna Loa	.....	Hawaii	13,675
Jungfrau	Alps	Switzerland	13,667
Cameroon	.....	British Cameroons	13,353
Erebus	.....	Antarctica	13,202
Robson	Rockies	British Columbia	12,972
Fujiyama (Fujisan)	.....	Japan	12,385
Cook	Southern Alps	South Island, New Zealand	12,349
Hood	Cascades	Oregon	11,245

* Reported to have increased by 198 ft. during earthquake of Aug. 15, 1950.

Large Islands of the World

Island and status	Location	Area, sq. mi.
GREENLAND (Danish colony)	North Atlantic	839,782
NEW GUINEA (Temporarily under Dutch crown [status unsettled], west part; U. N. trust territory under Australian administration, northeast part; Australian territory, southeast part)	Southwest Pacific	312,329
BORNEO (United States of Indonesia, south part; British protectorate and colonies, north part)	South China Sea	290,012
MADAGASCAR (French overseas territory)	Off east coast of Africa	228,589
BAFFIN (Canada, Northwest Territories)	Arctic Ocean	201,600
SUMATRA (United States of Indonesia)	Indian Ocean	163,145
HONSHU (Japanese home island)	Sea of Japan—Pacific	91,278
GREAT BRITAIN (Eng., Scotland, Wales)	Off coast of northwest Europe	88,133
VICTORIA (Canada, Northwest Territories)	Arctic Ocean	80,450
ELLESMERE (Canada, Northwest Territories)	Arctic Ocean	75,024
CELEBES (United States of Indonesia)	Southwest Pacific	69,255
SOUTH ISLAND, NEW ZEALAND	South Pacific	58,093
JAVA (United States of Indonesia)	Indian Ocean	48,504
NORTH ISLAND, NEW ZEALAND	South Pacific	44,281
NEWFOUNDLAND	North Atlantic	42,734
CUBA (Republic)	Caribbean Sea	42,350
LUZON	Philippine Islands	40,814
ICELAND (Republic)	North Atlantic	39,688
MINDANAO	Philippine Islands	36,906
HOKKAIDO (Japanese home island)	Sea of Japan—Pacific	34,084
IRELAND (Ireland, republic, south part; Northern Ireland, part of United Kingdom)	West of Great Britain	31,840
HISPANIOLA (Dominican Republic, east part; Haitian republic, west part)	Caribbean Sea	30,075
TASMANIA (Australian state)	South of Australia	26,215
BANKS (Canada, Northwest Territories)	Arctic Ocean	25,992
CEYLON (British dominion)	Indian Ocean	25,332
SAKHALIN (U.S.S.R.)	North of Japan	24,560
DEVON (Canada, Northwest Territories)	Arctic Ocean	20,484
TIERRA DEL FUEGO (East part to Argentina; west part to Chile)	Southern tip of South America	18,530
MELVILLE (Canada, Northwest Territories)	Arctic Ocean	16,164
SOUTHAMPTON (Canada, N. W. Territories)	Hudson Bay	16,114

Oceans and Seas

Name	Area, sq. mi.	Average depth, feet	Greatest known depth, ft.	Place of greatest known depth
Pacific Ocean	63,801,700	14,048	35,400	Off Mindanao
Atlantic Ocean	31,830,800	12,880	30,246	Off Puerto Rico
Indian Ocean	28,356,300	13,002	22,968	Off Sumatra-Java
Arctic Ocean	5,440,200	3,953	17,850	77° 45' N.; 175° W.
Mediterranean Sea*	1,145,100	4,688	15,564	Off Cape Matapan, Greece
Caribbean Sea	1,049,500	8,685	22,788	Off Cayman Islands
South China Sea	895,400	5,419	18,090	West of Luzon
Bering Sea	875,800	4,714	13,422	Off Buldir Island
Gulf of Mexico	618,200	4,874	12,744	Sigsbee Deep
Okhotsk Sea	589,800	2,749	11,400	146° 10' E.; 46° 50' N.
East China Sea	482,300	617	9,126	25° 16' N.; 125° E.
Hudson Bay	475,800	420	600	Near entrance
Sea of Japan	389,100	4,429	12,276	Central Basin
Andaman Sea	308,000	2,854	12,392	Off Car Nicobar Island
North Sea	222,100	308	2,165	Skagerrak
Red Sea	169,100	1,611	7,254	Off Port Sudan
Baltic Sea	163,000	180	1,380	Off Gotland

* Including Black Sea and Sea of Azov.

Famous Waterfalls of the World

Waterfall	Location	River	Height, feet
Angel	Venezuela	.....	3,300
Cuquenán, or Kukenaam	Venezuela-British Guiana	Cuquenán	2,000
Sutherland	South Island, N. Z.	Arthur	1,904
Tugela	Natal, South Africa	Tugela	1,800
Ribbon (Yosemite)	California	Creek, flowing into Yosemite	1,612
Upper Yosemite	California	Yosemite Creek, tributary of Merced	1,430
Gavarnie	Southwestern France	Gave de Pau	1,385
Takkakaw	British Columbia	Tributary of Yoho	1,200
Widow's Tears (Yosemite)	California	Tributary of Merced	1,170
Staubbach	Switzerland	Staubbach (Lauterbrunnen valley)	980
Trummelbach	Switzerland	Trummelbach (Lauterbrunnen)	950
Middle Cascade (Yosemite)	California	Yosemite Creek, tributary of Merced	910
Multnomah	Oregon	Multnomah Creek, tributary of Columbia	850
Vettisfos	Norway	Morkedöla	850
King Edward VII	British Guiana	Courantyne	840
Gersoppa	India	Sharavati	830
Kaeteur	British Guiana	Pataro	741
Kalambo	Tanganyika-N. Rhodesia	.....	705
Fairy (Mt. Rainier Park)	Washington	Stevens Creek	700
Maradalsfos	Norway	Stream flowing into Ejkisdalsvand (lake)	650
Skykkjefos	Norway	In Skykkjedal (valley) of Inner Hardanger Fiord	650
Terni	Italy	Velino, tributary of Nera	650
Maletsunyane (Le Bihan)	Basutoland, Africa	Maletsunyane	630
Bridal Veil (Yosemite)	California	Bridal Veil Creek, tributary of Merced	620
Nevada (Yosemite)	California	Merced	594
Voringfos	Norway	Bjorela	535
Skjaeggedalsfos	Norway	Tyssaå	525
Marina	British Guiana	Tributary of Kuribrong, a tributary of the Pataro	500
Tequendama	Colombia	Bogotá	450
King George's	Cape Province, South Africa	Orange	450
Herval Cascades	Brazil	.....	400
Guayra	Paraguay-Brazil	Paraná	374
Illilouette (Yosemite)	California	Illilouette Creek, tributary of Merced	370
Granite (Mt. Rainier Park)	Washington	Granite Creek	350
Splendor of Sun	Nikko, Japan	.....	350
Victoria	Southern Rhodesia	Zambezi	343
Comet (Mt. Rainier Park)	Washington	Van Trump Creek	320
Lower Yosemite	California	Yosemite Creek	320
Vernal (Yosemite)	California	Merced	317
Virginia	Northwest Territories, Canada	South Nahanni, tributary of Mackenzie	315
Lower Yellowstone	Wyoming	Yellowstone	308
Grand	Labrador, Canada	Hamilton	302
Sluiskin (Mt. Rainier Park)	Washington	Paradise	300
Snoqualmie	Washington	Snoqualmie	270
Seven Falls	Colorado	.....	266
Tallulah	Georgia	Tallulah	251
Shoshone	Idaho	Snake	195
Narada (Mt. Rainier Park)	Washington	Paradise	168
Niagara	New York-Ontario	Niagara	167
Tower (Yellowstone)	Wyoming	Tower Creek, tributary of Yellowstone	132

PRINCIPAL DESERTS OF THE WORLD

Desert	Location	Approximate size	Approximate elevation, ft.	Features
Atacama.....	North Chile.....	400 mi. long.....	7,000-13,500.....	Rugged. Rich in minerals, particularly nitrates.
Black Rock.....	Northwest Nevada.....	70 mi. long and in places 20 mi. wide, or about 1,000 sq. mi.	2,000-5,000.....	Usually dry, with a white alkali crust. Serves as the "sink" of the Quinn River and at times covered with water a few inches deep.
Colorado.....	Southeast California from San Geronio Pass to Gulf of California.....	200 mi. long and a maximum width of 50 mi.	Few feet above to about 250 below sea level.....	Average 90° F. Has reached 125° F. in the shade. Contains Salton Sea (overflow of Colorado).
Dasht-i-Kavir.....	Southeast of Caspian Sea in Iran.....	800 by 400 mi., or at least 300,000 sq. mi.	1,000.....	A salt depression. Vast deposits of solid rock salt.
Dasht-i-Lut.....	Northeast of Kerman in Iran.....	800 by 400 mi., or at least 300,000 sq. mi.	3,000-5,000.....	Sand desert.
Gobi (Shamo or "Desert of Sand").....	Covers most of Mongolia.....	1,500 mi. long.....	.....	Sandy soils with much alkali. Some well-watered areas. Several caravan routes. Fossil remains.
Great Arabian.....	Most of Arabia.....	400 mi. long and average of 200 mi. wide.....	1,850.....	Series of arid plateaus with scattered oases.
Syrian (El Hamad).....	South of 30° N. Latitude.....	400 mi. long and average of 200 mi. wide.....	3,000.....	Stony with numerous wadis (dry stream beds).
Nefud (Red Desert).....	South of Jaufr.....	About one-half the continent.....	600-1,000.....	Almost waterless but rich in pasture in the rainy season (winter and spring). Large sand dunes.
Dahna.....	Southeast of Nefud.....	80 by 50 mi.....	4,500.....	Waterless but rich in pasture in winter and spring.
Rub' al Khali.....	South portion of Nejd.....	400 by 30 mi.....	.....	Areas of "fixed dunes" and stony ("gibbers") wastes.
Great Australian.....	Western portion of Australia.....	400 by 600 mi., or about 120,000 sq. mi.....	Over 3,000.....	Salt desert with numerous salt flats. Some used in setting world automobile speed records.
Great Sandy; (Includes: Great Sandy; Great Salt Lake.....	Gibson; Great Victoria; Arunta.) West of Great Salt Lake to Nevada-Utah line.....	110,000 sq. mi.....	.....	Mild climate. Red sand. Some vegetation and game.
Kalahari.....	South Africa between the Orange and Zambezi Rivers.....	370 by 220 mi., or about 70,000 sq. mi.....	160 near Lake Aral to 2,000 in southeast.....	Flat sandy wastes interspersed with broad expanses of clay soil. Water found only in wells.
Kara Kum (Desert of Khiva or "Black Sands").....	Southwest Turkistan south of Lake Aral.....	15,000 sq. mi.....	.....	Arid grazing land. Numerous sand dunes moving southward.
Kizil Kum.....	Central Turkistan southeast of Lake Aral.....	75 mi. wide.....	.....	Temperature range 70°-125° F. during summer months. Hot dry alkali flats interspersed with salt-pans or lakes. Scanty vegetation.
Mohave.....	North of Colorado Desert and south of Death Valley in southeast California.....	3,200 mi. greatest length along 20° N. Lat.; width varies from 800 to 1,400 mi. Area over 3,500,000 sq. mi.	High plateau 5,000..... 440 below sea level to 11,000 above with an average elevation of 1,400-1,600.....	Mild climate. Named for its bright colorful rocks. Varied surface. East Libyan desert is sand; central part contains rocky hills and mountains; west consists of low stony plains and dunes. Crossed by chain of oases. Well-marked caravan routes.
Painted Desert.....	Northeast Arizona.....	More than 500,000 sq. mi.....	.....	Series of deep depressions, some below sea level.
Sahara.....	Northern states of Africa to about 15° N. Lat. and from Red Sea to the Atlantic Ocean.....	700 mi. long.....	2,500.....	Famous caravan routes through oases such as Kharga, Dakhla, Farafra, Bahariya, Siwa and Cufra.
Libyan.....	East portion of the Sahara west of Nile.....	About 300 mi. by 380 mi.....	About 500.....	Sand and rock desert with some small fertile oases.
Nubian.....	From Red Sea to great west bend of the Nile.....	.....	.....	Extremes of climate: -22°-86° F. In April, uninhabited. Can be safely crossed only in winter.
Takla Makan.....	S. Central Sinkiang in Tarim Basin.....	.....	.....	Marco Polo left a vivid description of this desert.
Thar (Indian).....	Chiefly Rajputana, Union of India.....	.....	.....	Sandy with strips of cultivable land.

Principal Rivers of the World

River	Source	Outflow	Approx. length, miles
Nile	Lake Victoria	Mediterranean Sea	4,000
Missouri-Mississippi	Source of Red Rock Creek, Montana	Gulf of Mexico	3,988
Amazon	Glacier-fed lakes in Peru	Atlantic Ocean	3,900
Ob	Altai Mts., U.S.S.R.	Gulf of Ob	3,200
Yangtze Kiang	Tibetan plateau	China Sea	3,100
Amur	Confluence of Shilka (U.S.S.R.) and Argun (Manchuria) Rivers	Tartary Strait	2,900
Congo	Between Lakes Nyasa and Tanganyika	Atlantic Ocean	2,900
Lena	Baikal Mts., U.S.S.R.	Arctic Ocean	2,800
Yenisei	Tannu Ola Mountains, western Mongolia	Arctic Ocean	2,800
Hwang Ho (Yellow)	East part of Kunlun Mts., west China	Gulf of Chihli	2,700
Niger	Border of Sierra Leone	Gulf of Guinea	2,600
Mackenzie	Head of Finlay River, British Columbia	Beaufort Sea (Arctic Ocean)	2,514
Mékong	Tibetan highlands	South China Sea	2,500
Missouri	Actual headwaters Red Rock Creek; beginning of Missouri at conflu- ence of Gallatin, Mad- ison, Jefferson Rivers	Mississippi River	2,475 (confluence) 2,723 (headwaters)
Mississippi	Lake Itasca, Minnesota	Gulf of Mexico	2,470
Paraná	Confluence of Paranaíba and Grande Rivers, southeast Brazil	Río de la Plata (Atlantic Ocean)	2,450
Murray	Australian Alps, New South Wales	Indian (Southern) Ocean	2,310
Irtish	Altai Mts., U.S.S.R.	Ob River	2,300
Volga	Valdai plateau, U.S.S.R.	Caspian Sea	2,300
Madeira	Confluence of Gauporé and Maumoré Rivers on Bolivia-Brazil boundary	Amazon River	2,000
St. Lawrence	St. Louis River, Minn.	Gulf of St. Lawrence	1,900
Rio Grande	San Juan Mts., Colorado	Gulf of Mexico	1,800
São Francisco	Southwest Minas Geraes, Brazil	Atlantic Ocean	1,800
Yukon	Junction of Lewes and Pelly, Yukon Territory	Bering Sea	1,800
Salween	Tibet, south of Kunlun Mountains	Gulf of Martaban	1,750
Danube	Black Forest, Germany	Black Sea	1,725
Euphrates	Dumlu Dag (moun- tains), Turkey	Persian Gulf	1,700
Indus	Himalayas	Arabian Sea	1,700
Orinoco	Sierra Parima on Vene- zuela-Brazil boundary	Atlantic Ocean	1,700
Tocantins	Near Pyrenopolis, southeast Brazil	Pará River (Atlantic Ocean)	1,700
Brahmaputra	Himalayas	Ganges River (Bay of Bengal)	1,680
Si Kiang	Plateau of Yunnan, southwest China	China Sea	1,650
Nelson	Head of Bow River, west Alberta, Canada	Hudson Bay	1,600
Zambezi	11°21'S.; 24°22'E., North- ern Rhodesia, Africa	Indian Ocean	1,600
Ganges	Himalayas	Bay of Bengal	1,540
Amu Darya (Oxus)	Nicholas Range, Pamir Mountains, U.S.S.R.	Lake Aral	1,500

River	Source	Outflow	Approx. length, miles
Paraguay	Mato Grosso, Brazil	Paraná River	1,500
Yapurá	Andes, Colombia	Amazon River	1,500
Arkansas	Central Colorado	Mississippi River	1,450
Colorado	Middle Park, northern Colorado	Gulf of California	1,440
Dnieper	Valdai Hills, U.S.S.R.	Black Sea	1,400
Negro	Watershed between Orinoco and Amazon	Amazon River	1,400
Ural	Southern Ural Mountains, U.S.S.R.	Caspian Sea	1,400
Ohio-Allegheny	Plateau in Potter County, Pa.	Mississippi River	1,306
Orange	Basutoland, Africa	Atlantic Ocean	1,300
Irrawaddy	Confluence of N'mai and Mali Rivers, northeast Burma	Bay of Bengal	1,250
Columbia	Columbia Lake, British Columbia	Pacific Ocean	1,214
Saskatchewan	Western Alberta, Canada	Lake Winnipeg	1,205
Darling	Central part of Eastern Highlands, Australia	Murray River	1,160
Tigris	Taurus Mts., Turkey	Persian Gulf	1,150
Don	Lake Ivan, U.S.S.R.	Sea of Azov	1,100

Large Lakes of the World

Name and location	Area, sq. mi.	Length, miles	Maximum depth, feet	Elevation above sea level, feet
Caspian, U.S.S.R.—Iran	169,300	795	3,612	-86
Superior, U. S. A.—Canada	31,820	383	1,290	602
Aral, U.S.S.R.	26,233	280	222	155
Victoria, East Central Africa	26,200	250	270	3,720
Huron, U. S. A.—Canada	23,010	206	750	580
Michigan, U. S. A.	22,400	321	923	580
Baikal, U.S.S.R.	13,300	385	5,413	1,515
Tanganyika, East Central Africa	12,700	450	4,708	2,536
Great Bear, Canada	12,000	195	270*	391
Great Slave, Canada	11,170	325	—	495
Nyasa, Southern Africa	11,000	350	2,580	1,650
Erie, U. S. A.—Canada	9,940	241	210	572
Winnipeg, Canada	9,398	260	70	712
Ontario, U. S. A.—Canada	7,540	193	778	245
Urkhash, U.S.S.R.	7,115	430	36	900
Adoga, U.S.S.R.	7,000	125	730	55
Unga, U.S.S.R.	3,764	145	408	125
Rudolf, Eastern Africa	3,475	185	—	1,250
Titicaca, Bolivia—Peru	3,200	125	892	12,507
Caragua, Nicaragua	3,089	110	200	135
Athabaska, Canada	3,058	195	—	699
Wendee, Canada	2,444	155	—	1,150
Syk-Kul, U.S.S.R.	2,230	115	2,300	5,400
Okon Nor, China	2,200	66	—	10,000
Ätern, Sweden	2,143	87	292	144
Winnipegosis, Canada	2,086	122	38	831
Angweulu, East Central Africa	1,900	60	15	3,700
Epigon, Canada	1,870	70	—	852
Manitoba, Canada	1,817	120	12*	813
Urmia, Iran	1,750*	80-90	16	4,184
Bert, Uganda, Africa	1,640	100	50	2,037
Uabawnt, Canada	1,600	65	—	500
Great Salt, U. S. A.	1,500	75	15-25*	4,200
Uan, Turkey	1,453	80	—	5,642

* Average.

Volcanoes of the Earth

There are approximately 430 volcanoes (275 in the Northern Hemisphere and 155 in the Southern) with recorded eruptions in historical times. Of the 2,500 recorded eruptions, more than 2,000 have taken place in the Pacific area. Of known active volcanoes, 80 are of the submarine type.

ATLANTIC-INDIAN AREA

Mediterranean Region

Italy: Mt. Vesuvius, southeast of Naples (3,858 ft.). Only active volcano on mainland of Europe. Pompeii buried by an eruption, A.D. 79. Latest eruption in 1944.

Sicily: Mt. Etna, eastern Sicily (10,741 ft.). Two new craters formed in eruptions of Feb.-Mar., 1947; latest eruption, 1949.

Lipari Islands (north of Sicily): Stromboli (about 3,000 ft.). Called "Lighthouse of the Mediterranean." Erupted 1949.

Atlantic Area

Canary Islands: Pico de Teide (Teneriffe), on island of Teneriffe (12,192 ft.).

Cape Verde Islands: Fogo (over 8,000 ft.). Severe eruption in 1857.

Iceland: At least 25 volcanoes active in historic times. Has exceeded all other volcanic areas in output of lava. These volcanoes very similar to those in Hawaii.

Hekla (4,747 ft.). Several craters, largest about 1¼ mi. in circumference. Most recent eruptions reported in 1947-48.

Skaptarjökull. Series of volcanoes near Skaptar; erupted in 1783 with large loss of life.

Askja (4,600 ft.). Largest in Iceland.

Jan Mayen Island: Beerenberg, northern part of island (over 8,000 ft.). Extinct.

British Cameroons: Mt. Cameroon (13,353 ft.). Has several craters. Last erupted in 1922.

Lesser Antilles (West Indian Islands): Mt. Pelée, in northwestern Martinique (about 4,400 ft.). Eruption in 1902 destroyed town of St. Pierre and killed approximately 40,000.

Indian Ocean Region

Comoro Islands (east of northern Mozambique): One volcano, Kartala (over 8,500 ft.). Visible for over 100 miles. Last erupted in 1904.

Réunion Island (east of Madagascar): Piton de la Fournaise (Le Volcan) (8,610 ft.). Eruptions in the form of large lava flows.

Tanganyika Territory: Kilimanjaro (19,565 ft.). Extinct. Highest mountain in Africa.

THE PACIFIC AREA

Northwest Portion

Kamchatka: 14-18 active volcanoes.

Shiveluch (over 10,500 ft.). Most northerly volcano of Kamchatka group.

Klyuchevskaya (Kluchev) (15,912 ft.). Highest peak in Siberia; called the "Etna of Kamchatka." Reported active in 1946.

Koryatskaya (over 11,500 ft.). Violent eruption in 1895.

Kurile Islands: At least 13 active volcanoes and several submarine outbreaks.

Japan: at least 33 active vents.

Fujiyama (Fujisan), southwest of Tokyo (12,385 ft.). Symmetrical in outline, snow-covered. Regarded as a sacred mountain.

Adzumayama (7,733 ft.). Eruption in 1900 killed 82.

Asamayama (8,182 ft.). Continuously active; violent eruption in 1783; latest in 1949.

Asosan (5,223 ft.). Crater 10 by 15 miles is the largest known in the world; erupted most recently in 1949.

Bandaisan, about 125 miles north of Tokyo (9,037 ft.). Violent eruption in 1888 devastated a 27-square-mile area.

Two volcanic islets south of Japan emerged in the ocean for a brief time in 1946, then submerged.

Ryukyu archipelago: Nakano-shima (8,485 ft.); Suwanose-shima (2,697 ft.).

Bonin (Ogasawara) Islands: Mt. Suribachi, on Iwo Jima (546 ft.). A sulfurous steaming volcano. Raising of U. S. flag over Mt. Suribachi was one of the dramatic episodes of World War II.

New Britain archipelago: Numerous active vents, including Father, on New Britain (7,500 ft.).

Santa Cruz Islands: Tinakula (2,200 ft.).

New Hebrides: Lopevi (4,755 ft.).

Samoa archipelago: Savaii. An eruption in 1905 did considerable damage. Niuafoou (Tin Can) between Samoa and Fiji Islands has a crater 6,000 feet below and 600 feet above water. Active in 1946.

Philippine Islands: 98 eruptive centers.

Taal, on Volcano Island in Lake Bombon (about 1,000 ft.). Crater over 7,500 ft. in diameter.

Mayon, in southeastern Luzon (7,946 ft.). An almost perfect cone. Continuous mild activity. In 1897 there was a destructive eruption. Considerable activity in 1947.

Moluccas: A volcanic chain of islands which contains several active volcanoes.

Hawaiian Group:

Mauna Loa (13,675 ft.). Also called "Long Mountain." Discharges more lava than any other volcano. Largest volcanic mountain in the world in cubic content, with crater of 3.7 sq. mi. Violent eruption in June 1950, with lava pouring 25 mi. into the ocean.

Mauna Kea (13,784 ft.). Highest mountain in group.

Hualalai (8,269 ft.). Has many small pit craters. Only lava flow in historic times was in 1801.

Kilauea (4,090 ft.). A vent in side of Mauna Loa but apparently erupts independently of it. One of the most spectacular and active craters. Crater has an area of 4.14 sq. mi.

Southwest Portion

Sumatra: Ninety volcanoes have been discovered; 12 are now active. The most famous, Krakatoa, is a small volcanic island in the Sunda Strait. Numerous volcanic discharges occurred in 1883. One explosion caused the disappearance of the highest peak and the northern part of the island. Fine dust was carried around the world in the upper atmosphere. Over 36,000 persons lost their lives in resultant tidal waves, which were felt as far away as Cape Horn. Active again in 1928 and July, 1950.

Java: Thirteen of 125 volcanic centers are active. Few serious eruptions. Galunggung is famous for two destructive eruptions in 1822. It is thought that over 100 villages and about 4,000 lives were lost.

Lesser Sunda Islands: Fifteen eruptive cones. Tamboro on Soembawa (Sumbawa) (about 9,000 ft.) was 13,000 ft. prior to a severe eruption in 1815, which ejected an estimated 36 cu. mi. of material.

Melanesian area: Volcanoes are located on New Guinea, New Hebrides, Santa Cruz, Solomons, and on numerous other small islands.

New Zealand: Tarawera, on North Island. Severe eruption in 1886 destroyed the famous pink and white sinter terraces of Rotomahana, a hot lake.

Ngauruhoe (7,515 ft.). Emits steam and vapor incessantly.

Northeast Portion

Aleutian area: There are 32 active vents known, and numerous inactive cones in remarkably straight line.

Shisaldin, on Unimak (8,683 ft.). Latest eruption Jan., 1947.

Bogosloff, on Bogosloff island (Castle) (about 1,000 ft.). Mountain first appeared after an eruption in 1796.

Alaska:

Wrangell (14,005 ft.).

Katmai (about 7,500 ft.). On June 6, 1912, a violent eruption occurred, during which the "Valley of Ten Thousand Smokes" was formed.

United States: Lassen Peak, in California (10,453 ft.). Only observed active volcano in the United States. Last period of activity in 1914-17. Other mountains of volcanic origin include Mt. Shasta, Mt. Hood, Mt. Rainier, and the mountain that contains Crater Lake.

Mexico:

Popocatepetl (17,883 ft.). Crater 673 ft. deep and $2\frac{1}{2}$ mi. in circumference. Not entirely extinct; steam still escapes.

Colima, in group of same name (14,239 ft.). Group has had frequent eruptions.

Orizaba (Citlaltepētli) (18,696 ft.). Probably the most symmetrical volcanic cone.

Tuxtla (4,900 ft.). Had a violent eruption in 1793 but is now quiescent.

Parícutin. A new volcano. First appeared in Feb., 1943, in a cornfield. In less than a week a cone over 140 ft. high developed with a crater one quarter mile in circumference. Cone grew over 1,500 ft. in 1943. Still active and growing.

Guatemala:

Santa María Quezaltenango (12,361 ft.). Frequent activity between 1902-08 and 1922-28 after centuries of quiescence. Most dangerously active vent of Central America. Other volcanoes include Tajumulco (13,814 ft.) and Atitlán (11,633 ft.).

El Salvador: Izalco, "beacon of Central America," which first appeared in 1770 and is still growing; (erupted in July, 1950); San Salvador, which had a violent eruption in 1923 and Conchagua, which erupted with considerable damage early in 1947.

Nicaragua: Volcanoes include Telica (latest eruption in 1950), Coseguina, and Momotombo (4,126 ft.). Between Momotombo on the western shore of Lake Managua and Coseguina overlooking the Gulf of Fonseca, there is a string of more than 20 cones, many still active. One of these, Cerro Negro, erupted in July, 1947, with considerable damage and loss of life, and again in April, 1948 and July, 1949.

Costa Rica: Four volcanic cones whose bases merge are Poás (8,895 ft.), Barba (9,280 ft.), Irazú (10,525 ft.), and Turrialba (11,350 ft.).

Southeast Portion

Colombia: Huila (18,700 ft.), a vapor-emitting volcano, and Tolima (17,109 ft.).

Eruption of Puracé (15,420 ft.), 1949, killed 17.

Ecuador: Cotopaxi (19,344 ft.). Perhaps highest active volcano in the world. Possesses a beautifully formed cone.

Cayambe (19,016 ft.). Almost on equator. Other volcanoes include Tunguragua (16,689 ft.), Sangay (17,470 ft.), and Antisana (over 18,000 ft.).

Peru and Bolivia: Many active volcanoes.

Misti, near Arequipa, Peru (19,167 ft.).

Sajama, in Bolivia (21,391 ft.).

Licancábur, in Bolivia (about 19,500 ft.).

Chile and Argentina: About 25 active or potentially active; destructive eruption of Villarrica, Chile, 1948; active in 1949.

Interesting Caves and Caverns of the World

Aggtelek. In village of same name, northern Hungary. Large stalactitic cavern about 5 miles long.

Altamira Cave. Near Santander, Spain. Contains animal paintings (Old Stone Age art) on roof and walls.

Antiparos. On island of same name in the Grecian Archipelago. Some stalactites are 20 ft. long. Brilliant colors and fantastic shapes.

Blue Grotto. On island of Capri, Italy. Cavern hollowed out in limestone by constant wave action. Now half filled with water because of sinking coast. Name derived from unusual blue light permeating the cave. Source of light is a submerged opening, light passing through the water.

Carlsbad Caverns. Southeast New Mexico. Largest underground labyrinth yet discovered. Three levels: 754; 900, and 1,320 feet below the surface.

Fingal's Cave. On island of Staffa off coast of western Scotland. Penetrates about 200 ft. inland. Contains basaltic columns almost 40 ft. high.

Ice Cave. Near Dobsina, Czechoslovakia. Noted for its beautiful crystal effects.

Jenolan Caves. In Blue Mountain plateau, New South Wales, Australia. Beautiful stalactitic formations.

Kent's Cavern. Near Torquay, England. Source of much information on Paleolithic man.

Luray Cavern. Near Luray, Virginia. Has large stalactitic and stalagmitic columns of many colors.

Mammoth Cave. Limestone cavern in central Kentucky. Cave area is about 10 miles in diameter but has at least 150 miles of irregular subterranean passageways at various levels. Temperature remains fairly constant at 54°F.

Peak Cavern or Devil's Hole. Derbyshire, England. About 2,250 ft. into a mountain. Lowest part is about 600 ft. below the surface.

Postumia (Adelsberg) Grotto. Near Postumia in Julian Alps, about 25 miles N.E. of Trieste. Stalactitic cavern, largest in Europe. Piuca (Pivka) River flows through part of it. Caves have numerous beautiful stalactites.

Singing Cave. Iceland. A lava cave; name derived from echoes of people singing in it.

Wind Cave. In Black Hills of South Dakota. Limestone caverns with stalactites and stalagmites almost entirely missing. Variety of crystal formations called "boxwork."

Wyandotte Cave. In Crawford County, southern Indiana. A limestone cavern with five levels of passages; one of the largest in North America. "Monumental Mountain," approximately 135 ft. high, is believed to be one of the world's largest underground "mountains."

Geysers

Geysers exist in many volcanic regions of the world such as Japan and South America, but their greatest development is in Iceland, New Zealand and Yellowstone National Park, Wyoming, U. S. A.

Iceland. The principal geyser area is about 30 miles northwest of Mt. Hekla, where there are more than 100 geysers and hot springs in about two square miles. The main ones are the following:

Great Geyser (Geysir). Sends up a column 160 to 180 ft. high intermittently from an opening more than 9 ft. across and about 70 ft. deep.

Strokkur (Churn). Constant bubbling and occasional eruptions.

New Zealand. There is a great profusion of boiling springs, steam jets and mud volcanoes northeast of Lake Taupo on North Island. Main geysers are *Waikite*, with a 30-35 ft. column, *Pohutu* and *Waimauku*.

United States

Yellowstone National Park, Wyoming. There are 120 named geysers in Yellowstone and perhaps half that number un-

named. Most of the geysers and the 4,000 hot springs are located in the western portion of the park. The most important ones are as follows:

Norris Geyser Basin has 18 or more geysers; the number varies. There are scores of steam vents and hot springs. *Valentine*, highest in basin, 75 ft. at 18-hour intervals; tube is 60 ft. long. *Minuté*, 15-20 ft. high, several hours apart. Others are small; these include *Steamboat*, *Fearless*, *Veteran*, *Vixen*, *Corporal* and *Monarch*. Some are dormant.

Lower Geyser Basin. In the 1870's it had 680 hot springs and geysers. Many now are only hot springs, but at least 18 are active geysers. *Fountain*, at one time very well known. Water thrown 75 ft. in all directions and at all angles. Now dormant. *Clepsydra*, very active; some eruption cycles last for several hours; maximum height 75 ft. *Great Fountain* plays every 12 to 13 hours for 30 minutes in spurts which rise from 60 to 80 ft.

Midway Geyser Basin has vast steaming terraces of red, orange, pink and other colors; pools and springs. *Excelsior Geyser* crater discharges boiling water into Fire-

hole River at the rate of 6 cu. ft. per second.

Upper Geyser Basin includes: *Artemisia* sends up a column 35 ft. high for 10 to 15 minutes every 18 to 24 hours. *Fan* sends out fan-shaped eruptions about 60 ft. high every 2 or 3 days. *Riverside* has an unusual cone; throws water 75 ft. obliquely over the river from lower crater for half an hour. It has a remarkably regular interval of 8 hours between eruptions.

Rocket jets up to 70 ft. at intervals of 2 to 5 days. When its neighbor, *Grotto*, erupts simultaneously the jet is only 10 ft.

Grotto throws water 20 to 30 ft. for 15 minutes to 8 hours.

Giant erupts to 200 ft. Eruptions last an hour but are 7 days to 3 months apart. A single eruption has been estimated to contain 700,000 gallons.

Daisy sends water to a height of 75 ft. every 135 minutes.

Old Faithful sends up a column about 140 ft. high at average intervals of 65 minutes, varying from 35 to 80 minutes. Eruption lasts about 4 minutes. Discharges about 12,000 gallons of water at each eruption.

Giantess erupts like a small volcano every six to nine months. The eruption rises to a maximum height of 200 ft. and usually lasts $4\frac{1}{2}$ hours.

Lion group: *Lion*, *Lioness*, *Big Cub* and *Little Cub* erupt irregularly from one to 18 times a day.

Castle is reported to have largest and most imposing cone of any active geyser in the world. Erupts twice a day to a height of 75 ft. but at times throws water continually to about 20 ft.

Mammoth Hot Springs. There are no geysers in this area. The formation is travertine. Sides of a hill are steps and terraces over which flow the steaming waters of hot springs laden with minerals. Each step is tinted by algae to many shades of scarlet, orange, pink, yellow and blue. Terraces are white where no water flows.

Other groups of geysers, hot pools and mud pots are located on the west shore of Shoshone Lake, on West Thumb Bay, at Mud Volcano, in the Grand Canyon of the Yellowstone, and on Mirror Plateau.

Bell Time on Shipboard

A.M.			P.M.		
12:30—1 Bell	4:30—1 Bell	8:30—1 Bell	12:30—1 Bell	4:30—1 Bell	8:30—1 Bell
1:00—2 Bells	5:00—2 Bells	9:00—2 Bells	1:00—2 Bells	5:00—2 Bells	9:00—2 Bells
1:30—3 "	5:30—3 "	9:30—3 "	1:30—3 "	5:30—3 "	9:30—3 "
2:00—4 "	6:00—4 "	10:00—4 "	2:00—4 "	6:00—4 "	10:00—4 "
2:30—5 "	6:30—5 "	10:30—5 "	2:30—5 "	6:30—5 "	10:30—5 "
3:00—6 "	7:00—6 "	11:00—6 "	3:00—6 "	7:00—6 "	11:00—6 "
3:30—7 "	7:30—7 "	11:30—7 "	3:30—7 "	7:30—7 "	11:30—7 "
4:00—8 "	8:00—8 "	noon—8 "	4:00—8 "	8:00—8 "	12:00—8 "

World Extremes of Climate

Highest recorded shade temperature:

World: 136° F. at Azizia, Libya, North Africa, September 13, 1922.
United States: 134° F. at Death Valley, California, July 10, 1913.

Lowest recorded temperature:

World: —90° F. at Verkhoyansk, Siberia, U.S.S.R., February 5 and 7, 1892; a temperature of —94° F. was reported in Siberia during the winter of 1946–47 but was not verified by the Soviet government.
United States: —66° F. at Yellowstone Park, Wyoming, February 9, 1933.

Highest mean annual temperature:

World: 86° F. at Massawa, Eritrea, Africa.
United States: 77.3° F. at Tavernier, Fla.

Lowest mean annual temperature:

World: —14° F. at Framheim, Antarctica.
United States: 26.9° F. at Mt. Washington, N. H. (14-year record).

Maximum rainfall for 24-hour period:

World: 46 inches at Baguio, Luzon, Philippines, July 14–15, 1911.
United States: 26.12 inches at Camp Leroy, California, January 22–23, 1943.

Maximum recorded rainfall in one month:

366 inches at Cherrapunji, India, July, 1861 (over 150 inches fell in 5 consecutive days in August, 1841). Average annual rainfall at Cherrapunji is 424 inches. A 22-year average annual rainfall of about 450 inches, however, is generally accepted as the value for Mt. Waialeale, Island of Kauai, Hawaiian Islands.

Minimum recorded rainfall:

World: .04 inch at Iquique, Chile, average yearly fall during 40 years.
United States: 3.93 inches at Bagdad, California, the total for five years, 1909–13.
Average annual precipitation for the United States is about 29 inches.

Louisiana is the wettest state, with an annual average (57 years) of 56.51 inches.

Nevada is the driest state, with an annual average (59 years) of 8.99 inches.

Highest local average annual rainfall in the United States was 150.73 inches at Wynoochee Oxbow, Washington, based on a 13-year record.

Greatest 4-hour fall was at Lake Charles, La.—15½ inches—on June 19, 1947. Greatest 24-hour rainfall in the United States was 38.2 inches at Thrall, Texas, September 9-10, 1921.

Heavy snowfall records include 60 inches in one day at Giant Forest, California; 42 inches in 2 days at Angola, New York; 54 inches in 3 days at The Dalles, Oregon; and 96 inches in 4 days at Vanceboro, Maine. In the New York City blizzard of Dec. 26, 1947, 25.8 inches of snow fell in about 20 hours, almost 5 inches more than fell in the blizzard of March, 1888. Greatest seasonal snowfall was 884 inches, over 73 feet, at Tamarack, California, during 1906-07.

Ancient Empires

The *Egyptian* and *Babylonian* empires, Near Eastern civilizations whose cultures mark the beginning of written history, had their origins in the nebulous period of ancient history prior to the year 4000 B.C. They developed rapidly in the fertile river valleys of the Nile in Egypt and the Tigris-Euphrates in Mesopotamia after the discovery of metals and the invention of writing. Their governments were all-powerful, with the people subjugated and without political rights. The Egyptians regarded their king as a god. In Babylon, the ruler was a priest-king, earthly representative of the gods. Nevertheless, these Near East cultures made great contributions to the eternal march of man; they advanced the ways of making and doing things, produced the earliest literature, developed the principles of law (the code of Hammurabi, Babylonian king of the 18th [or possibly 17th] century B.C., the oldest code of law) and science, learned the basic principles of art, and evolved early religious worship.

The influence of Babylon and Egypt was felt in the rise of the Semitic tribes of Syria, the Hittites in Asia Minor, and the people of the Aegean region. Between the years 1200 and 800 B.C., the small Syrian states grew to great power and then were overwhelmed by the great empire of the *Assyrians*, the warlike peasants of the Tigris valley, who took the lessons learned from the Babylonians and spread that culture over their domains. The Assyrians, like the Egyptians and the Babylonians, in turn fell under the power of the *Persian* kings in the century between 600 and 500 B.C. By 525 B.C., the Persian Empire extended from India to Egypt, the greatest the world had ever seen.

The lessons learned by these early Near Eastern civilizations were transmitted to *Greece*, which developed its illustrious empire in the Aegean region, after the inhabitants of the island of Crete had absorbed the Egyptian culture. The mainland Greeks overthrew the Cretans and in turn were succeeded by the Doric Greeks, who spread their culture across the Aegean, the Asia Minor coast, and into the Mediterranean and Black Sea regions. The char-

acteristic Greek political institution was the city-state, first ruled by kings and often temporary monarchical tyrannies, and finally by the participation of free citizens. Literature and the arts flourished, and by the 5th century B.C., when Athens became the great city of the Greeks, drama had risen to full maturity with the great tragedies of Sophocles and Euripides and the comedies of Aristophanes. Architecture and art advanced apace. The Greeks, learning much from their Egyptian teachers, produced such superb buildings as the Parthenon and created amazingly beautiful statues through the use of living models. Religion, which was closely linked with art, also flourished, as did the development of philosophy, under the great Socrates (470?-399 B.C.), Plato (427?-347 B.C.), and Aristotle (384-322 B.C.). Wars weakened the city-states, and they fell to Alexander the Great in the 4th century B.C.

Last among the great ancient empires was the *Roman*, which developed in Italy and gained control over the Mediterranean region after absorbing the culture of Greece and combining with it new principles of law and art and teaching their new learning to the West. The development of the Roman civilization began in 510 or 509 B.C., when the peoples on the peninsula of Italy freed themselves from the rule of the Etruscans. The Romans, with a republican form of government, speedily conquered Italy and the Mediterranean region, and the Roman governors became men of great wealth, corrupting the city-state system and making it a graft-ridden machine of exploitation. The failure of the government to check this self-seeking influence brought on a revolt which resulted eventually in the rise of Julius Caesar to dictatorship in 46-44 B.C. Caesar's murder in the Senate at Rome was followed in 27 B.C. by the establishment of the one-man rule of Augustus over the Roman Empire. Legal practices were developed and became the foundations of modern law. Great roads, bridges and buildings were constructed. This great ancient civilization began to crumble in the 3d century A.D.

Languages of the World

(spoken by 5,000,000 or more people)

Language	Number speaking	Language	Number speaking
American Indian: including Mayan, Quéchua and 750-1,000 languages and dialects	15,000,000	Bisayan, Ilocano, Javanese, Malay, Malagasy, Sundanese, Tagalog	80,000,000
Amharic (Ethiopia)	5,600,000	Iranian: including Baluchi, Kurdish, Persian, Pushtu	26,500,000
Annamese (Indo-China)	20,000,000	Italian	50,000,000
Arabic	58,000,000	Japanese	80,000,000
Bantu: including Swahili, Zulu (S. Africa)	45,000,000	Javanese	32,000,000
Bengali (India; Pakistan)	63,000,000	Kanarese (India)	13,400,000
Berber dialects (N. Africa)	6,000,000	Korean	27,000,000
Bihari (India)	28,000,000	Lahnda (India; Pakistan)	10,000,000
Bisayan (Philippines)	5,500,000	Malay (Neth. Indies)	10,000,000
Bulgarian	7,000,000	Malayalam (India)	10,000,000
Burmese	11,000,000	Marathi (India)	23,000,000
Catalan (Spain)	6,000,000	Munda (India)	5,000,000
Chinese: including Mandarin, Cantonese and others	450,000,000	Oriya (India)	9,600,000
Cushitic: including Somali (Ethiopia)	7,000,000	Persian	12,000,000
Czech	8,000,000	Polish	30,000,000
Dravidian: including Kanarese, Malayalam, Tamil, Telugu (India)	80,000,000	Portuguese	60,000,000
Dutch	10,000,000	Punjabi (India; Pakistan)	18,800,000
English	225,000,000	Pushtu (Afghanistan; Pakistan)	8,000,000
Ethiopian: including Amharic	6,400,000	Rajasthani (India; Pakistan)	15,225,000
Finno-Ugric: including Estonian, Finnish, Hungarian, Karelian, Lappish	21,500,000	Rumanian	16,000,000
Flemish (Belgium)	5,000,000	Russian	180,000,000
French	65,000,000	Serbo-Croatian (Yugoslavia)	15,000,000
German	100,000,000	Siamese	16,000,000
Greek	8,000,000	Singhalese (Ceylon)	5,000,000
Gujarati (India)	13,000,000	Spanish	110,000,000
Hausa (Central Africa)	9,000,000	Sudanic: including Hausa (Central Africa)	75,000,000
Hindustani (India; Pakistan)	140,000,000	Sundanese (Neth. Indies)	8,500,000
Hungarian	13,000,000	Swahili (S. Africa)	8,000,000
Indic: including Assamese, Bengali, Bihari, Gujarati, Hindustani, Lahnda, Marathi, Oriya, Punjabi, Rajasthani, Sindhi, Singhalese	325,000,000	Swedish	7,000,000
Indonesian: including Balinese,		Tai: including Siamese	18,000,000
		Tamil (India)	23,850,000
		Telugu (India)	27,000,000
		Tibeto-Burman: including Tibetan and Burmese	20,000,000
		Turkic: including Kazakh, Tatar, Turkish, Uzbek	42,000,000
		Turkish	18,000,000
		Uzbek (U.S.S.R.)	5,000,000
		Yiddish	5,000,000

Universities—Ancient and Modern

Universities, in the modern sense of the term, sprang up in the 12th and 13th centuries in response to the resurgence of learning that preceded the Renaissance in Europe. Procedure at the early universities was informal, with students gathering at some place in a city to listen to a pre-eminent teacher. There were no campuses, buildings or endowments. Actually, the term "university" once meant a guild or corporation; there were, in the medieval period, "universities" of bootmakers, weavers, etc. Thus the university of learning was similar in organization to the guilds. The students filled the role of apprentices and the teachers were the masters.

The first European university was that

of Salerno in the 9th century, when it was known as a school of medicine. By the 11th century, it had become one of the most famous medical schools of Europe.

University of Bologna. Organized in 1158 by students as a means of protection against the merchants and citizens of Bologna who had raised prices of food and lodging. It was famous for its legal scholars. The students were organized into two guilds and exercised a great deal of authority over the administration and the professors; they controlled all academic matters except the granting of degrees.

Other Italian universities famed in the Middle Ages included those at Arezzo, Fer-

rara, Florence, Modena, Naples, Padua, Pavia, Perugia, Siena and Vicenza.

University of Paris. Originated between 1150 and 1170 in a cathedral school on the Ile de la Cité, it was later moved to the left (south) bank of the Seine, although it remained under the authority of the chancellor of Notre Dame. It developed into the most famous continental center of learning of its day. Its four principal schools were theology, medicine, law and arts. By the 14th century, the university had some 40 colleges, of which the *Sorbonne* became the most celebrated.

The universities of Paris and Bologna had a marked influence in the subsequent creation of other university centers. About 1200, there was a migration of students from Paris to *Oxford* (founded in the 12th century) and a decade or two later, from *Oxford* to *Cambridge* (also founded in the 12th century).

Other famous universities of the Middle Ages include the *University of Toulouse* (1233), *Salamanca* (1243), *Seville* (1254), *Orléans* (1305), *Valladolid* (1346), *Prague* (1347), *Kraków* (1364), *Vienna* (1364), *Erfurt* (1379), *Heidelberg* (1385), *Cologne* (1388), *Leipzig* (1409), *Rostock* (1419) and *Louvain* (1426).

The Renaissance

The Renaissance gave fresh impetus to the universities of Europe. In France three of importance arose in the 15th century—the *University of Aix* (1409, Provence), the *University of Poitiers* (1431) and the *University of Caen* (1437).

Other French institutions of note that arose in this era were at *Bordeaux* (1441), *Valence* (1452), *Nantes* (1463) and *Bourges* (1465). New European universities were also founded at *Trier* (1450), *Freiburg* (1455), *Ingolstadt* (1459), *Basel* (1460), *Budapest* (1475), *Mainz* (1476), *Uppsala* (1477), *Tübingen* (1477), *Copenhagen* (1479), *Wittenberg* (1502), *Frankfurt on Oder* (1506) and *Coimbra* (1537).

St. Andrews, founded in 1411, was the first university in Scotland. Others were the *University of Glasgow* (1453), the *University of Aberdeen* (1494) and the *College of Edinburgh* (1582). In Ireland, *Trinity College* was founded in Dublin in 1591.

Reformation and Post-Reformation

Until the Reformation, most of the institutions of higher learning in Europe were under the tutelage of the Catholic Church. After 1520, however, many established universities declared their independence of the Church. Cromwell's rule brought about new scholastic methods at both *Oxford* and *Cambridge* and the establishment of new colleges thoroughly imbued with Protestantism.

But the first Protestant university was

that of *Marburg*, Germany, founded in 1527. Other Protestant universities were: *Königsberg* (1544); *Jena* (1558); *Helmstedt* (1575); *Altdorf* (1575); *Gießen* (1607); *Strasbourg* (1621) and *Halle* (1693).

18th, 19th and 20th Centuries

Among the more famous institutions in this era was *Göttingen* (1736), whose school of history became celebrated throughout Europe. Others were: *Erlangen* (1743); *Berlin* (1809); *Lemberg* (Lwów) (1816); *Bonn* (1818); *Helsingfors* (1826); the *National University* at *Athens* (1837); *Bucharest* (1864); *Tokyo* (1868); *Sofia* (1888); *Kyoto* (1897), and *Constantinople* (or *Stamboul*) (1900).

Among the more famous British universities established in the 19th and 20th centuries were the *University of London* (1825); *Manchester* (1851); *Liverpool* (1881); the *Mason University College* in *Birmingham* (1900); *Leeds* (1904), and the *University College* in *Sheffield* (1905). The *University of Wales* is composed of colleges in *Aberystwyth*, *Bangor*, *Cardiff* and *Swansea*.

There are many important and large universities in the British dominions. In Canada, the famous *McGill University* in *Montreal* was founded in 1821. Others are the *University of Toronto* (1827); *Queens University* at *Kingston, Ont.* (1841); *Laval University*, *Quebec* (1852); *Dalhousie*, *Halifax* (1818), and *Montreal University* (1876).

The early universities in India were patterned after *London University* rather than on the *Oxford-Cambridge* style, and were purely examining institutions. *Calcutta* and *Madras* universities were founded in 1857 as examining schools.

In Australia, the state plays an important role in the development of universities. The *University of Melbourne* (1853) has the largest enrollment. Among the others are *Adelaide* (1874); *Tasmania* (1890); *Queensland* (1909); *Sydney* (1850), and *West Australia* (1913).

There are also many well-endowed universities in New Zealand, South Africa, and other parts of the Commonwealth.

In 1755, Russia had only three universities—*Vilna* (1578), *Dorpat* (1632) and *Moscow* (1755). Other institutions developed later were the *University of Kharkov* (1804); *Kazan* (1804); *St. Petersburg* (1819); *St. Vladimir* in *Kiev* (1832); *Odessa* (1865); *Warsaw*, which is now Polish (1886) and *Tomsk*, in *Siberia* (1888). The building of universities after the Revolution of 1917 was spurred by the Soviet government.

In China, the growth of universities was hampered by the chaotic state of the government in the 1900's, the recurring civil wars and the conflict with Japan.

The United States

Universities in the United States marched in step with the progress of the nation. The early settlers brought a heritage of European culture which they planted in New England soil. The first university in the country was started as *Harvard College* in 1636, with an endowment totaling 800 pounds. Harvard was to become probably the most famous of the American universities, with an endowment in 1950 of more than \$175,000,000, a faculty of 2,400 members and a student enrollment of approximately 11,000.

The *College of William and Mary* (1693) was the second institution of higher learning established in the colonies. Others started during the colonial period (current names only) are: *Yale* (1701); *University of Pennsylvania* (1740); *Princeton* (1746); *Washington and Lee* (1749); *Co-*

lumbia (1754); *Brown* (1764); *Rutgers* (1766) and *Dartmouth* (1769).

After the Revolution of 1776, the state tax-supported university was established. The *University of Virginia* (1819) was a notable early example of this type.

Colleges for women grew up in the second quarter of the 19th century. Among these are: *Mt. Holyoke* (1837); *Elmira* (1855); *Vassar* (1861); *Wells* (1868); *Hunter* (1870); *Wellesley* (1870); *Smith* (1871) and *Bryn Mawr* (1880).

In the latter part of the 19th century, universities established by private endowments arose. Typical of these are: *Cornell* (1865), which is also a land-grant institution; *Johns Hopkins* (1876); *Stanford* (1885) and the *University of Chicago* (1891).

Libraries of the World

Europe and Asia

Among the great libraries of the world, the *British Museum* remains in the first rank with more than 5,000,000 printed volumes and manuscripts. It contains such outstanding treasures as the *Codex Alexandrinus* and the *Codex Sinaiticus* of the Bible, the best collection of Greek papyri from Egypt, and vast collections of original historical manuscripts of incalculable value. Some 150,000 volumes were destroyed in air raids during World War II, but many were replaced later.

One of the finest libraries in the world is the *Bibliothèque Nationale* in Paris, which has approximately 5,000,000 volumes, 130,000 manuscripts, 400,000 medals and coins, and 4,000,000 prints and engravings.

The *State Library* in Berlin, founded in 1659–61, was combined in 1947 with the library of the Technische Hochschule to form a new institution known as the *Oeffentliche Wissenschaftliche Bibliothek*. Prior to World War II, the *State Library* had 2,850,000 volumes; the new combined library has only 1,500,000. The *State Library* at Munich also suffered extensive war losses, with some 500,000 volumes destroyed; it now contains about 2,000,000. The *Deutsche Bücherei* at Leipzig had recovered most of its losses by 1950 and has more than 2,000,000 volumes. Estimates have placed the war losses of all German libraries at between 20 and 25 million volumes.

The *Österreichische Nationalbibliothek* in Vienna has about 1,350,000 volumes and a large collection of papyri.

While not as large as some of the European state libraries, the *Biblioteca Apostolica Vaticana* in Rome has many priceless

old manuscripts bequeathed to the Vatican over the centuries. The printed books number about 700,000, the incunabula about 6,000 and the manuscripts about 50,000.

Three of the more important Italian libraries are the *Biblioteca Nazionale* in Naples, with about 1,250,000 volumes and 11,000 manuscripts; the *Biblioteca Nazionale Centrale* in Florence, with 3,400,000 volumes, manuscripts and pamphlets, and the *Biblioteca Nazionale Centrale* in Rome, with approximately 1,940,000 volumes.

Other large European libraries are the *Bibliothèque Royale* in Brussels (2,000,000 volumes), the *Biblioteca Nacional* in Madrid (1,500,000), the *University Library* at Amsterdam (more than 1,500,000) and the *Royal Library* in Stockholm (650,000). The *Lenin State Library* in Moscow is said to contain 11,000,000 volumes—largest single collection in the world—besides many collections of valuable historical documents. In Leningrad, the *Gosudarstvennaya Public Library* claims 6,000,000 volumes and the *Library of the Academy of Sciences* some 5,000,000.

In the Far East, the most extensive libraries are found in Japan, although war damage in 1944–45 was severe. In Tokyo, the *Imperial University Library* has slightly more than 1,000,000 volumes, the *Imperial Cabinet Library* 510,000, and the *Waseda University Library* 400,000. The *Imperial University Library* at Kyoto contains about 1,100,000.

The United States and Canada

The earliest libraries in the Colonial era were privately owned, although in 1731 Benjamin Franklin projected the first subscription library in Philadelphia. Endow-

ments helped to set up many of the large libraries, although many of these institutions are now receiving state or municipal support.

The largest library in the United States is the *Library of Congress*, established in 1800 by Congress. In 1950, it contained 8,956,993 books and pamphlets. It extends services to members of Congress and other government departments, and also offers excellent facilities for persons engaged in scholarly research.

The *New York Public Library*, with more than 4,500,000 volumes, is the largest public library in the United States.

By 1947 there were more than 7,100 public libraries in the continental United States, and about 4,200 libraries of other kinds—school, institutional, professional, government and special.

The growth of libraries attached to col-

leges and universities in the United States has been phenomenal, and some of the university libraries are among the largest in the country. Among them are (total volumes in parentheses): Harvard (5,250,000); Yale (3,878,000); University of California, including branches (2,612,000); University of Illinois (2,284,000); Columbia (1,870,000); University of Chicago (1,750,000); Princeton (1,500,000); University of Minnesota (1,482,000); University of Michigan (1,416,000); Cornell (1,400,000); University of Wisconsin (1,340,000); Stanford (1,222,000); and University of Pennsylvania (1,165,000).

In Canada, the most important public library is that of Toronto, which has more than 700,000 volumes. Extensive libraries attached to the universities are at Queens (219,000), McGill (543,000), and Laval (843,000).

Museums of the World

(For U. S. Museums see INDEX.)

The modern museum originated during the Renaissance, when the revival of interest in the arts and classical antiquity led princes, nobles and humanists to amass specimens of historical value and to house their collections in special buildings or galleries.

Art Museums

The *British Museum*, London, contains some of the most famous historical objects of the world, including the Elgin Marbles and the Rosetta Stone.

Victoria and Albert Museum, London, whose primary object is to furnish examples to illustrate the history of art, emphasizes architecture and sculpture, ceramics, engraving, book production, paintings, textiles, etc. The library is devoted principally to fine and applied arts of all countries.

National Gallery, London, contains a great number of old Masters, including paintings by Da Vinci, Michelangelo, Tintoretto, Mantegna, Titian, Bellini, Jan van Eyck, Rubens, Rembrandt, Holbein, Constable and Turner.

Tate Gallery, London, established as part of the National Gallery, was badly damaged during air raids of World War II, but was completely restored by 1949.

Wallace Collection, London, has many objects d'art and curios of French origin, and first-rank canvases and etchings of Italian, Spanish, Flemish, Dutch and English artists.

In France, the most famous gallery is the *Louvre* in Paris, noted for the magnificence of its architecture as well as for its art collection, which is the largest in the world. Other Parisian museums of im-

portance are *Cluny*, *Rodin*, *Gulmet*, and *Carnavalet*.

Among the magnificent Italian museums, the *National Museum* at Naples contains one of the best arranged and classified collections. The *Uffizi Gallery* in Florence, founded by the Medici, has one of the world's largest and best collections of Italian art. Other galleries in Florence are the *Gallery of Modern Art (Pitti Palace)* and the *National Museum (Bargello)*. Rome has numerous museums, including several in the Vatican.

In Berlin, the *Schloss Museum* and *National Gallery* were damaged during World War II.

The *Royal Museum of Fine Arts* in Brussels has a fine collection of French, Flemish and Dutch masters and houses many canvases by Rubens, Van Dyck, Jordaens, Rembrandt, Frans Hals and Jan Steen.

The *State Museum* in Amsterdam contains superb works by Rembrandt, Vermeer and others.

Among the notable art museums in other countries are the world-famous *Museo del Prado* in Madrid; the *Tretyakov State Gallery*, the *Pushkin State Museum of Fine Arts* and the *Hermitage State Museum* in Moscow; and the *National Museum* in Tokyo, famed for its many Oriental paintings and examples of Oriental workmanship in lacquer, jade, ivory and metal.

Science Museums

The *Ashmolean Museum*, oldest in Great Britain, was founded in 1683 by the University of Oxford and houses a collection of archeological rarities.

Science Museum of London has exhibits

of scientific instruments and appliances which review the progress of science and the history of invention. Other London museums of science are the *Natural History (British Museum)*, the *Imperial War Museum* (exhibits of both World Wars) and the *Geological Museum*.

The *Liverpool Museums* contain valuable collections of natural history and antiquities and are divided into departments of zoology, botany, geology, archeology and ethnology. The buildings were almost completely destroyed during World War II, although most of the exhibits were saved.

The *Manchester Museum* serves as both a municipal and a university museum. The *Bristol Museum* contains departments of geology, zoology, botany, archeology and Bristol antiquities. The *National Museum of Wales* at Cardiff has departments of archeology, botany, geology and zoology.

In Edinburgh, Scotland, are the famed *Royal Scottish Museum*, which has collections in art, ethnography, natural history, technology and geology; and the *National Museum of Antiquities of Scotland*, noted for its coin and manuscript collections.

The *National Museum* in Dublin and the *Municipal Museum* in Belfast have important science collections.

Notable institutions of continental Europe include the *Natural History Museum* in Paris, the *Museum of Oceanography* in Monaco, the *Natural History Museum* in Lisbon, the *State Museum of Geology and Mineralogy* in Leyden (Netherlands), the *Museum of Natural History* in Stockholm, the *Natural History Museum* in Vienna, the *Hungarian National Museum* in Budapest, the *National Museum* in Prague, and the various natural science museums

in Basel, Berne, Geneva, Lausanne and Neuchâtel, Switzerland. Most larger cities of the U.S.S.R. have science museums of varying sizes, some specializing in local exhibits of natural history.

Famous science museums in Germany prior to World War II included the various sections of the *Staatlichen Museen* in Berlin and the museums of natural history and ethnography in Hamburg.

In Calcutta is the *Indian Museum*, outstanding for its marine fauna and vertebrate fossils, and in Bombay the *Victoria and Albert Museum*.

In Australia are the *Queensland Museum* and the *Botanic Museum* in Brisbane, the *South Australian Museum* in Adelaide, and the *Australian Museum* in Sydney.

New Zealand contains the *Canterbury Museum*, Christchurch, rich in local fauna, flora and geological items, and a Maori and Polynesian ethnological collection. The *Otago Museum* of natural sciences and anthropology at Dunedin, the *Auckland Institute and Museum* in Auckland and the *Dominion Museum* in Wellington are others of note.

In Africa, the *South Africa Museum*, Capetown, holds general and local history collections and others illustrating anthropology, ethnology and archeology. The *Durban Museum* contains much anthropological material. In Cairo are the notable collections of the *Egyptian Museum*.

Other museums of note include the *Archeological Museums* at Istanbul, the *Tokyo Science Museum*, the *National Museum of Natural History* in Santiago (Chile), the *National Museum* at Rio de Janeiro, and the *Argentine National Museum of Natural Sciences* at Buenos Aires.

Zoological Gardens of the World

Far from being a modern idea, the custom of keeping savage beasts in captivity is as ancient as recorded history. In the early part of the 12th century, B.C., the Chinese king Wen had a special zoo where he housed animals captured from all parts of ancient China.

One of the earliest modern zoos, the *Jardin des Plantes* in Paris, was established in 1793. In the following century zoological gardens were established in many of the major cities of the world.

At Giza, outside Cairo, the zoological garden is lodged in a beautiful park maintained by the Egyptian government. Its large collection of animals is chiefly African in origin. Elsewhere in Africa, at Khartoum in the Sudan, at Pretoria (largest on the continent) and at Johannesburg, fine specimens are found in state-supported zoological gardens.

North America has more than 30 major zoos, in the United States, Canada and Mexico. The *Quebec Zoological Society's* collection is made up of Canadian species; Toronto has also many exotic species.

The first zoological garden in the United States was established in Philadelphia in 1874. Since that time nearly every large city in the country has acquired a zoo. Among the largest are the celebrated *Bronx Zoo* and the *Central Park Zoo* in New York, the *Lincoln Park Zoo* and the *Brookfield Zoo* in Chicago, and those in St. Louis, Detroit, Kansas City and San Diego. The *United States National Zoological Park* in Washington, D. C., in a beautiful setting of hills, woods and streams, was established in 1890 by an act of Congress. Some of the U. S. zoos exhibit their collections in open-air, barless pits; the Brookfield Zoo is an example.

Extensive collections in South America are found at Buenos Aires, and at Concepción and Santiago in Chile. At Belém, Brazil, a zoological-botanical garden is noteworthy for its specimens of Amazonian birds and animals.

In Asia, important collections were established by the governments and by native princes. Largest in India is the zoo at Alipore, Calcutta; other excellent zoos are located at Bombay, Karachi and on private estates. Singapore, Batavia and Surabaya have important collections. Others are found at Fort de Kock on Sumatra's west coast; and at Johore Bahru in Malaya. Japan abounds in large and small zoos and privately owned aviaries, located in Tokyo, Nagoya, Kyoto, Osaka and Kobe; many of these were severely damaged during World War II.

Sydney, Melbourne, Adelaide and Perth have large zoological gardens; smaller zoos in Australia are found at Brisbane and Wellington. The Auckland, New Zealand, collection has a representative group of native fauna.

In Europe, zoological gardens have long been popular public institutions. The *Jardin d'Acclimation*, in the Bois de Boulogne, Paris, was established in 1858, and a model zoo at Vincennes was added in 1937 for the Paris Exposition.

Germany had about 20 zoological gardens, many of which were developed in the peacetime years between World Wars I and II. Large zoos were located in Berlin and Frankfurt on Main. In Munich, the animals were grouped according to the continent of their origin. Others were established at Dresden, Leipzig and Cologne.

At Stellingen, the *Hagenbeck Garden* became an outstanding show place and distributing center for animals. Smaller collections were established at Düsseldorf, Elberfeld and Hanover. Several German zoos, notably that at Berlin, were destroyed during World War II.

The *Schönbrunn* at Vienna is one of the oldest zoos in Europe. The Budapest zoological gardens house a fine collection of European birds. At Antwerp, the *Royal Zoological Society* founded a large menagerie in 1843. It was seriously damaged by German bombs during World War II.

In the British Isles, the outstanding collection is in the garden of the *London Zoological Society* in Regent's Park. Although this zoo received a number of direct bomb hits in 1940-41 and again in 1944, it remained open throughout World War II; visitors during this period numbered 6,500,000. Manchester and Clifton have smaller gardens, and the one at Edinburgh is famous for its collection of penguins. The *Dublin Zoo* is noted for its lions, many of which were born there.

The Amsterdam zoo, with its East Indian collection and its aquarium, and the Rotterdam gardens are the two best known in the Netherlands. Built on a high elevation, the *Skansen Zoo* in Stockholm exhibits north European specimens. The most important gardens in the U.S.S.R. are found in Moscow, where northern as well as exotic species are collected. The zoo at Rome has part of its collection confined in barless pits. At Lisbon there is a small zoological garden, and in Madrid a part of the original royal menagerie.

Famous Structures

(See also Seven Wonders of the World.)

Ancient

The Great Sphinx of Egypt, one of the wonders of ancient Egyptian architecture, adjoins the pyramids of Giza and has a length of 189 ft. It was built in the 4th dynasty and was used as a temple.

Other Egyptian buildings of note include the *Temples of Karnak and Edfu* and the *Tombs at Beni Hassan*.

The Parthenon of Greece, built on the Acropolis in Athens, was the chief temple to the goddess Athena. It was believed to have been completed by 438 B.C. The present temple remained intact until the 5th century A.D. Today, though the Parthenon is in ruins, its majestic proportions are still discernible.

Other great structures of ancient Greece were the *Temples at Paestum* (about 540 and 420 B.C.); the *Temple of Poseidon* (about 460 B.C.); the *Temple of Apollo at Corinth* (about 540 B.C.); the *Temple of Apollo at Bassae* (about 450-420 B.C.); the

famous *Erechtheum* atop the Acropolis (about 421-405 B.C.); the *Temple of Athena Nike* at Athens (about 426 B.C.); the *Olympieum* at Athens (174 B.C.-A.D. 131); the *Athenian Treasury* at Delphi (about 515 B.C.); the *Propylaea* of the Acropolis at Athens (437-432 B.C.); the *Theater of Dionysus* at Athens (about 350-325 B.C.); the "*House of Cleopatra*" at Delos (138 B.C.) and the *Theater at Epidaurus* (about 325 B.C.).

The Colosseum (Flavian Amphitheater) of Rome, the largest and most famous of the Roman amphitheaters, was opened for use A.D. 80. Elliptical in shape, it consisted of three stories and an upper gallery, rebuilt in stone in its present form in the third century A.D. Its seats rise in tiers, which in turn are buttressed by concrete vaults and stone piers. It could seat between 40,000 and 50,000 spectators. The Colosseum was principally used for gladiatorial combat.

The *Pantheon* at Rome, begun by Agrippa in 27 B.C. as a temple, was rebuilt in its present circular form by Hadrian (A.D. 110-25). Literally the Pantheon was intended as a temple of "all the gods." It is remarkable for its perfect preservation today, and it has served continuously for 20 centuries as a place of worship.

Famous Roman arches includes the *Arch of Constantine* (about A.D. 315) and the *Arch of Titus* (about A.D. 80).

Later European

St. Mark's Cathedral in Venice (1063-67), one of the great examples of Byzantine architecture, was begun in the 9th century. Partly destroyed by fire in 976, it was later rebuilt as a Byzantine edifice.

Other famous Byzantine examples of architecture are *St. Sophia* in Constantinople (A.D. 532-37); *San Vitale* in Ravenna (542); *St. Paul's Outside the Walls*, Rome (5th century); the *Kremlin* baptism and marriage church, Moscow (begun in 1397); and *St. Lorenzo Outside the Walls*, Rome, begun in 588.

The *Cathedral Group* at Pisa (1067-1173), one of the most celebrated groups of structures built in Romanesque style, consists of the cathedral, the cathedral's baptistery, and the *Leaning Tower*. This trio forms a group by itself in the north-west corner of the city. The cathedral and baptistery are built in black and white marble. The campanile (*Leaning Tower*) is 179 ft. high and leans more than 16 feet out of the perpendicular. There is little reason to believe that the architects intended to have the tower lean.

Other examples of Romanesque architecture include the *Vézelay Abbey* in France (1130); the *Church of Notre-Dame-du-Port* at Clermont-Ferrand in France (1100); the *Church of San Zeno* (begun in 1138) at Verona, and *Durham Cathedral* in England.

The *Alhambra* (1248-1354), located in Granada, Spain, is universally esteemed as one of the great masterpieces of Mohammedan architecture. Designed as a palace and fortress for the Moorish monarchs of Granada, it is surrounded by a heavily fortified wall more than a mile in perimeter. The location of the Alhambra in the Sierra Nevada provides a magnificent setting for this jewel of Moorish Spain.

Notre-Dame de Paris (begun in 1163), one of the great examples of Gothic architecture, is a twin-towered church with a steeple over the crossing and immense flying buttresses supporting the masonry at the rear of the church.

Other famed Gothic structures are *Westminster Abbey*, London (begun 1245; damaged in World War II); *Chartres Cathedral* (12th century); *Sainte Chapelle*, Paris (1246-48); *Laon Cathedral*, France (1160-

1205); *Rheims Cathedral* (about 1210-50; rebuilt after its almost complete destruction in World War I); *Rouen Cathedral* (13th-16th centuries); *Amiens Cathedral* (1218-69); *Beauvais Cathedral* (begun 1247); *Salisbury Cathedral* (1220-60); *York Minster* or the *Cathedral of St. Peter* (begun in the 7th century); *Milan Cathedral* (begun 1386); and *Cologne Cathedral* (13th-19th centuries; badly damaged in World War II).

The *Duomo* (cathedral) in Florence was founded in 1298, completed by Brunelleschi and consecrated in 1436. The oval-shaped dome dominates the entire structure.

Other examples of Renaissance architecture are the *Palazzo Vecchio*, the *Palazzo Pitti* and the *Palazzo Strozzi* in Florence; *St. Peter's* in Rome (begun in 1506 and consecrated in 1626); the *Farnese Palace* in Rome; *Palazzo Grimani* (completed about 1550) in Venice; the *Escorial* (1563-93) near Madrid; the *Town Hall* of Seville (1527-32); the *Louvre*, Paris; the *Château at Blois*, France; *St. Paul's Cathedral*, London (1675-1710; badly damaged in World War II); the *Ecole Militaire*, Paris (1752); the *Pazzi Chapel*, Florence, designed by Brunelleschi (1429); the *Palaces of Versailles* and of *Fontainebleau* and the *Château de Chambord* in France.

Outstanding European buildings of the 18th and 19th centuries are the *Superga* at Turin, the *Hôtel-Dieu* in Lyon, the *Belvedere Palace* at Vienna, the *Royal Palace* of Stockholm, the *Opera House* of Paris (1863-75); the *Bank of England*, the *British Museum*, the *University of London* and the *Houses of Parliament*, all in London; the *Panthéon*, the *Church of the Madeleine*, the *Bourse* and the *Palais de Justice* in Paris.

Asiatic

The *Taj Mahal* (1632-50), at Agra, India, built by Shah Jahan as a tomb for his wife, is considered by some as the most perfect example of the Mogul style and by others as the most beautiful building in the world. Four slim white minarets flank the building, which is topped by a white dome; the entire structure is of marble.

Other examples of Indian architecture are the temples at Benares and Tanjore.

Famed Mohammedan edifices are the *Dome of the Rock* or *Mosque of Omar*, Jerusalem (A.D. 691); the *Citadel* (1168), and the *Tombs of the Mamelukes* (15th century), in Cairo; the *Tomb of Humayun* in Delhi; the *Blue Mosque* (1468) at Tabriz and the *Tamerlane Mausoleum* at Samarkand.

Angkor Vat, outside the city of Angkor Thom, Cambodia, is one of the most beautiful examples of Cambodian or Khmer architecture. The sanctuary was built during the 12th century. Its temple court is protected by a broad moat.

Great Wall of China (228 B.C.?), designed specifically as a defense against nomadic tribes, has numerous large watch towers which could be called buildings. It was erected by Emperor Ch'in Shih Huang Ti and is 1,400 miles long. Built mainly of earth and stone, it varies in height between 18 and 30 feet.

Typical of Chinese architecture are the pagodas or temple towers. Among some of the better known pagodas are the *Great Pagoda of the Wild Geese* at Sian (founded in 652); *Nan t'a* (11th century) at Fang Shan; the *Pagoda of Sung Yueh Ssu* (A.D. 523) at Sung Shan, Honan.

Other well-known Chinese buildings are the *Drum Tower* (1273), the *Three Great Halls* in the Purple Forbidden City (1627), *Buddha's Perfume Tower* (19th century),

the *Porcelain Pagoda* and the *Summer Palace*, all at Peiping.

United States

Rockefeller Center, New York City, completed in 1940, is a remarkable group of examples of American skyscraper architecture. It is dominated by the 70-story R. O. A. building in the center.

Empire State Building, New York City, the loftiest building in the world, has 102 stories and is 1,250 feet high.

Other famous examples of modern buildings in the United States are the *Chrysler Building* and the *Woolworth Building* in New York City; the *Merchandise Mart*, the *Board of Trade Building* and *Civic Opera Building* in Chicago; and the *Pentagon* in Washington.

Great Dams of the World

Reservoir capacity, thousands of acre feet	Name	Location	Maximum height, feet	Date completed
31,142	Hoover	Colorado River, Ariz.-Nev.	726	1936
24,500	Garrison	Missouri River, N. Dak.	210	*
19,600	Oahe	Missouri River, S. Dak.	230	*
19,412	Fort Peck	Missouri River, Mont.	250	1940
9,517	Grand Coulee	Columbia River, Wash.	550	1942
6,200	Fort Randall	Missouri River, S. Dak.	150	*
6,100	Kentucky	Tennessee River, Ky.	160	1944
6,089	Wolf Creek	Cumberland River, Ky.	242	*
5,825	Denison	Red River, Okla.-Tex.	165	1944
4,500	Shasta	Sacramento River, Calif.	602	1945
4,407	Gatun	Chagres River, Panama Canal Zone	115	1912
4,060	Aswan	Nile River, Egypt	174	1934
3,500	Hungry Horse	Flathead, S. Fk., Mont.	520	*
3,263	Lázaro Cárdenas (El Palmito)	Nazas River, Mex.	295	1948
3,000	Salt Springs	North Fork, Mokelumne River, Calif.	345	1931
2,567	Norris	Clinch River, Tenn.	265	1936
2,432	Alvaro Obregón (Oviachic)	Yaqui River, Sonora, Mex.	187	*
2,300	Saluda	Saluda River, S. C.	208	1930
2,219	Elephant Butte	Rio Grande, N. Mex.	301	1916
2,150	Mettur	Cauvery River, India	214	1934
2,092	Center Hill	Caney Fork River, Tenn.	240	*
2,000	Hume	Murray River, Australia	180	1936
2,000	Kingsley	North Platte River, Nebr.	162	1941
1,997	Osage (Bagnell)	Osage River, Mo.	148	1931
1,983	Norfolk	North Fork River, Ark.	230	1944
1,980	Chelsea	Gatineau River, Canada	100	1927
1,975	Pensacola	Grand River, Okla.	152	1940
1,934	Marshall Ford (Mansfield)	Colorado River, Tex.	270	1941
1,820	Davis	Colorado River, Ariz.-Nev.	200	1949
1,706	Dale Hollow	Obey River, Tenn.-Ky.	183	1943
1,704	American Falls	Snake River, Idaho-Wyo.	92	1927
1,702	El Azucar	San Juan River, Mexico	142	1943
1,565	Cherokee	Holston River, Tenn.	212	1942
1,560	Sardis	Little Tallahatchie River, Miss.	117	1940
1,540	Douglas	French Broad River, Tenn.	160	1943
1,450	Fontana	Little Tennessee River, N. C.	470	1944
1,400	Roosevelt	Salt River, Ariz.	280	1911

* Under construction in 1950.

Notable Modern Bridges

Length of channel span, feet	Name	Location	Type*	Year completed
4,200	GOLDEN GATE	San Francisco	S	1937
3,500	GEORGE WASHINGTON	New York City	S	1931
2,800	TACOMA NARROWS	Tacoma, Wash.	S	1950
2,310	TRANSBAY	San Francisco	S	1936
2,300	BRONX-WHITESTONE	New York City	S	1939
1,850	AMBASSADOR	Detroit, Mich.	S	1929
1,800	QUEBEC	Near Quebec, Canada	C	1917
1,750	DELAWARE RIVER	Philadelphia, Pa.	S	1926
1,700	FORTH	Firth of Forth, Scotland	C	1889
1,652	KILL VAN KULL	Bayonne, N. J.	SA	1931
1,650	SYDNEY HARBOR	Sydney, Australia	SA	1932
1,632	BEAR MOUNTAIN	Peekskill, N. Y.	S	1924
1,600	WILLIAMSBURG	New York City	S	1903
1,595.5	BROOKLYN	New York City	S	1883
1,550	LIONS GATE	Vancouver, Canada	S	1939
1,500	MID-HUDSON	Poughkeepsie, N. Y.	S	1930
1,500	HOWRAH	Calcutta, India	C	1943
1,470	MANHATTAN	New York City	S	1909
1,400	TRANSBAY	Oakland, Calif.	C	1936
1,380	TRIBOROUGH	New York City	S	1936
1,207	ST. JOHNS	Portland, Oreg.	S	1931
1,200	LONGVIEW	Longview, Wash.	C	1930
1,200	MT. HOPE	Near Bristol, R. I.	S	1929
1,182	QUEENSBORO	New York City	C	1909
1,114	FLORIANOPOLIS	Florianopolis, Brazil	S	1926
1,100	CARQUINEZ STRAIT	Near San Francisco	C	1927
1,097	MONTREAL HARBOR	Montreal, Canada	C	1930
1,080	BIRCHENOUGH	Southern Rhodesia	SA	1935
1,080	DEER ISLE	Deer Isle, Me.	S	1939
1,057	CINCINNATI	Cincinnati, Ohio	S	1867
1,050	OTTO BEIT	Southern Rhodesia	S	1939
1,050	COOPER RIVER	Charleston, S. C.	C	1929
1,010	WHEELING	Wheeling, W. Va.	S	1849
977.5	HELL GATE	New York City	SA	1917
964	EAST ST. LOUIS	East St. Louis, Ill.	C	1950
950	RAINBOW	Niagara Falls, N. Y.	SA	1941
949	GRAND MERE	Quebec, Canada	S	1928
930	PEACE RIVER	Alaska Highway	S	1943
924	STORY	Queensland, Australia	C	1940
875	NATCHEZ	Natchez, Miss.	C	1940
871	BLUE WATER	Port Huron, Mich.	C	1938
866	SANDO	Sando, Sweden	CA	1943
845	DUBUQUE	Dubuque, Iowa	CT	1943
800	THOUSAND ISLANDS	Alexandria Bay, N. Y.	S	1938
800	WALDO HANCOCK	Bucksport, Maine	S	1931
800	RIP VAN WINKLE	Catskill, N. Y.	C	1935
800	HENRY HUDSON	New York City	SA	1936
790	HUEY P. LONG	Near New Orleans, La.	C	1935

* C—Cantilever. S—Suspension. SA—Steel Arch. CA—Concrete Arch. CT—Continuous Truss.

America's Tallest Buildings

City	Building	No. of stories	Height, feet	City	Building	No. of stories	Height, feet
New York	Empire State	102	1,250	New York	10 E. 40th St	48	621
New York	Chrysler	77	1,046	New York	New York Life	40	617
New York	60 Wall Tower	66	950	New York	Singer	47	612
New York	Bk. of Manhattan	71	925	Chicago	Board of Trade	44	605
New York	R. C. A.	70	850	New York	U. S. Court House	37	590
New York	Woolworth	60	792	Pittsburgh	Gulf	44	582
New York	City Bank	54	745	New York	Municipal	40	580
Cleveland	Terminal Tower	52	708	Cincinnati	Carew Tower	48	574
New York	500 Fifth Avenue	60	700	New York	Continental Bank	48	565
New York	Metropolitan Life	50	700	New York	Sherry-Netherland	40	560
New York	Chanin	56	680	New York	N. Y. Central	35	560
New York	Lincoln	53	673	Chicago	Pittsfield	39	557
New York	Irving Trust	50	654	Columbus	Lincoln-LeVeque Tower	46	556
New York	General Electric	50	641	Chicago	Continental	42	555
New York	Waldorf-Astoria	47	625	Detroit	Penobscot	47	551

Great Disasters

Earthquakes and Volcanic Eruptions

A.D. 79	Aug. 24, ITALY: eruption of Mt. Vesuvius buried cities of Pompeii and Herculaneum, killing thousands.	1935	May 31, INDIA: earthquake at Quetta killed an estimated 50,000.
1755	Nov. 1, PORTUGAL: one of the most severe of recorded earthquakes leveled Lisbon and was felt as far away as southern France and North Africa; between 10,000 and 20,000 killed in Lisbon alone.	1939	Jan. 24, CHILE: earthquake razed some 50,000 sq. mi.; 30,000 killed.
1883	Aug. 26-28, NETHERLANDS INDIES: eruption of Krakatoa; violent explosions destroyed two-thirds of island. Sea waves occurred as far away as Cape Horn, and possibly England. Estimated 36,000 dead.	1939	Dec. 27, NORTHERN TURKEY: severe quakes destroyed city of Erzincan; about 100,000 casualties.
1902	May 8, MARTINIQUE, WEST INDIES: Mt. Pelée erupted and wiped out city of St. Pierre; 40,000 dead.	1948	June 28, JAPAN: series of earthquakes killed 3,000 in Fukui.
1906	April 18, SAN FRANCISCO: earthquake accompanied by fire razed more than 4 sq. mi.; more than 500 dead or missing; property damage about 250-300 millions.	1949	April 13, WASHINGTON AND OREGON: most destructive earthquake in history of Northwest U. S.; killed 8 and caused extensive damage.
1923	Sept. 1, JAPAN: earthquake destroyed third of Tokyo and most of Yokohama; more than 90,000 killed.	1949	Aug. 5, ECUADOR: earthquake killed about 6,000 and razed 50 towns.
		1950	May 21, PERU: most of Cuzco damaged by earthquake which killed at least 50.
		1950	July 8-11, COLOMBIA: series of quakes in North Santander Department killed at least 140.
		1950	Aug. 15, INDIA: second heaviest earthquake on record affected 30,000 sq. mi. in Assam, destroying at least 100,000 buildings and killing 1,000 in continuing shocks.

Tornadoes, Typhoons and Hurricanes

WORLD			
1864	Oct. 5, INDIA: most of Calcutta denuded by cyclone; 70,000 killed.	1934	Sept. 21, JAPAN: hurricane killed more than 4,000 on Honshu.
1876	Oct. 31, INDIA: cyclone and tidal wave swept 3,000 sq. mi. with Bengal worst hit; 215,000 killed.	1935	Oct. 25, HAITI: hurricane and flood ravaged Jérémie and Jacmel districts; 2,000 killed.
1882	June 6, INDIA: cyclone and tidal wave killed 100,000 in Bombay.	1942	Oct. 16, INDIA: cyclone devastated Bengal; about 40,000 lives lost.
1906	CHINA: typhoon at Hong Kong killed about 10,000.	1948	Sept. 16-17, JAPAN: typhoons killed more than 500; 600 missing.
1930	Sept. 3, SANTO DOMINGO (now Ciudad Trujillo): hurricane killed about 2,000 and injured 6,000.	1949	Oct. 27, INDIA: cyclone along southeastern coast killed about 1,000.
		1949	Oct. 31-Nov. 2, PHILIPPINES: 1,000 believed dead following typhoon.

1950 Sept. 3-4, JAPAN: typhoon centered on Honshu. 200 killed, many missing.

UNITED STATES

1884 Feb. 18, SOUTHERN STATES: tornadoes took about 700 lives.

1893 Aug. 27, SOUTHEAST COAST: 900 killed.

1900 Sept. 8, TEXAS: Galveston hurricane and tidal wave; 5,000 dead.

1925 March 18, MIDWEST: about 800 killed and 13,000 injured in tornado which hit Ill., Ind., Tenn., Ky., and Mo.

1926 Sept. 18, FLORIDA: hurricane which hit east coast took 373 lives and left 40,000 homeless.

1928 Sept. 12, FLORIDA: hurricane from Windward Islands killed 4,000.

1936 April 2, MISSISSIPPI AND GEORGIA: Tupelo, Miss., and Gainesville, Ga., centers of tornadoes which swept the South; 402 killed, 1,853 injured.

1938 Sept. 21, NEW ENGLAND: hurricane killed at least 488 in severest recorded storm of northeastern states.

1947 April 9, TEXAS AND OKLAHOMA: tornado killed approximately 150.

1947 Sept. 17-19, FLORIDA AND GULF COAST: hurricane killed about 100.

1948 March 20-27, MIDWEST AND SOUTH: 80 persons killed in tornadoes.

1949 Jan. 3, LOUISIANA AND ARKANSAS: about 60 killed in tornadoes, most of them at Warren, Ark.

1950 Feb. 12-13, LOUISIANA, TEXAS, TENNESSEE: tornadoes killed 51.

Floods and Tidal Waves

WORLD

1228 HOLLAND: 100,000 reputedly drowned by sea flood in Friesland section.

1642 CHINA: rebels besieging Kaifeng destroyed seawall, causing flood that drowned 300,000 inhabitants.

1887 CHINA: hundreds of thousands of lives reputedly lost in Honan province in overflow of Hwang Ho River.

1896 JAPAN: earthquake and tidal wave at Sanriku killed 27,000.

1939 CHINA: floods in north; casualties estimated at 10,000,000 homeless, starved or drowned.

1946 ALASKA-HAWAII: series of tidal waves in Pacific originating off Alaska killed about 150 in Hawaii.

1947 JAPAN: floods in wake of typhoon killed about 2,000 on Honshu Island.

1947 PAKISTAN: floodwaters in East Bengal left 1,000,000 homeless.

1948 TURKEY: hundreds of persons were drowned when two rivers in southern Turkey burst their dikes.

1948 CHINA: about 1,000 reported dead in floods near Foochow.

1950 CANADA: Winnipeg and vicinity flooded by three rivers; more than third of city was evacuated.

1950 CHINA: floods in eastern and southern China left 1,000,000 homeless and killed 500.

UNITED STATES

1889 PENNSYLVANIA: more than 2,000 died in Johnstown flood.

1912 MISSISSIPPI VALLEY: Mississippi River and tributaries overflowed; 200 dead.

1913 OHIO AND INDIANA: floods of Ohio and Indiana rivers took 730 lives.

1927 MISSISSIPPI VALLEY: floods inundated 20,000 sq. mi.; 700,000 homeless.

1937 MISSISSIPPI AND TRIBUTARY VALLEYS: floods in the Allegheny, Mississippi and Ohio valleys caused several hundred deaths.

1947 MISSISSIPPI RIVER: floods reached highest crest in 104 years—40.2 feet; few lives lost in St. Louis area.

1948 OREGON AND WASHINGTON: floods of Columbia and Willamette rivers; approximately 50 dead or missing.

Fires and Explosions

WORLD

1666 Sept. 2, ENGLAND: "Great Fire of London" destroyed 13,200 houses, St. Paul's Church, 86 parish churches, etc. Damage 10 million pounds.

1812 Sept. 14, RUSSIA: fire started by Russians in Moscow after French occupation destroyed 30,800 houses.

1881 Dec. 8, AUSTRIA: about 850 died in Ring Theater fire in Vienna.

1917 Dec. 6, CANADA: explosion and fire at Halifax when ammunition ship collided with a vessel; 1,500 dead.

1922 ASIA MINOR: more than three-fifths of Smyrna destroyed by fire following Turkish occupation.

1947 Aug. 15, ENGLAND: blast in under-seas coal mine near Whitehaven, Cumberland, killed 104 miners.

1948 July 28, GERMANY: hundreds killed and more than 6,000 injured in explosion which wrecked I. G. Farben chemical works in Ludwigshafen.

1949 Sept. 2, CHINA: Fire on Chunking waterfront killed 1,700 and gutted 10,000 buildings.

- 1950 May 6-7, CANADA: half of town of Rimouski razed by fire; several dead, 2,000 homeless.
- 1950 Sept. 26, ENGLAND: fire in colliery at Creswell killed 80 coal miners.

UNITED STATES

- 1835 Dec. 16, NEW YORK CITY: 530 buildings destroyed by fire.
- 1871 Oct. 8, CHICAGO: the "Chicago Fire," which started in barn, swept 2,124 acres, burned 17,450 buildings, killed 250 persons, and made 98,500 homeless; 196 million damage.
- 1872 Nov. 9, BOSTON: fire destroyed 800 buildings; 75 million damage.
- 1904 Feb. 7, BALTIMORE, MD.: Fire destroyed most of business section; 125 million damage.
- 1937 March 18, NEW LONDON, TEXAS: explosion destroyed schoolhouse; 413 children and 14 teachers killed.

- 1942 Nov. 28, BOSTON: Cocoanut Grove night club fire killed about 500.
- 1944 July 17, PORT CHICAGO, CALIF.: more than 300 killed in explosion of two ammunition ships.
- 1946 Dec. 7, ATLANTA: Fire in Winecoff Hotel killed 119.
- 1947 March 25, CENTRALIA, ILL.: explosion in coal mine killed 111 miners.
- 1947 April 16-18, TEXAS CITY, TEXAS: most of city destroyed, more than 500 dead following *Grandcamp* explosion.
- 1949 April 5, EFFINGHAM, ILL.: hospital fire killed 66, including 13 babies.
- 1950 Jan. 7, DAVENPORT, IOWA: fire in hospital killed 41 women, 40 of whom were patients.
- 1950 May 19, SOUTH AMBOY, N. J.: explosion of ammunition barges killed 31, injured 202.

Shipwrecks (not including military or naval action)

WORLD

- 1833 May 11, LADY OF THE LAKE: bound from England to Quebec, struck iceberg; 215 perished.
- 1853 Sept. 29, ANNIE JANE: emigrant vessel off coast of Scotland; 348 died.
- 1912 March 5, PRINCIPE DE ASTURIAS: Spanish steamer struck rock off Sebastien Pt.; 500 drowned.
- 1912 April 15, TITANIC: sank after colliding with iceberg; 1,513 died.
- 1914 May 29, EMPRESS OF IRELAND: sank after collision in St. Lawrence River; 1,024 perished.
- 1928 Nov. 12, VESTRIS: British steamer sank in gale off Virginia; 110 died.
- 1931 June 14, French excursion steamer overturned in gale off St. Nazaire; approximately 450 died.
- 1939 June 1, Submarine THETIS: sank in Liverpool Bay, Eng.; 99 perished.
- 1942 Oct. 2, QUEEN MARY: rammed and sank a British cruiser; 338 aboard the cruiser died.
- 1947 Jan. 19, HIMARA: Greek ship struck floating mine near Gulf of Petalida; approximately 400 killed or drowned.
- 1947 July 17, RAMDAS: coastal steamer sank off Bombay, India; death toll estimated at more than 600.
- 1948 Dec. 3, KIANGYA: Chinese refugee ship wrecked in explosion; about 1,000 believed dead.
- 1949 Jan. 27, TAIPING: Chinese liner collided with collier and both sank; at least 600 died.
- 1949 Sept. 17, NORONIC: Canadian Great Lakes cruise ship burned at Toronto dock; about 130 died.
- 1949 Sept. 22, FOURNIER: Argentine mine sweeper sank in Magellan Straits; 79 lost.
- 1950 Jan. 12, TRUCULENT: British submarine sank in Thames estuary after collision with tanker; 64 dead.
- 1950 April 12, HSINAN: Chinese Communist steamer collided with liner near Dairen, Manchuria; 70 dead.
- 1950 June 19, INDIAN ENTERPRISE: British freighter exploded in Red Sea; 72 of British and Pakistani crew lost.

U. S. AND U. S. LINES

- 1865 April 27, SULTANA: boiler explosion on Mississippi River steamboat near Memphis; 1,450 killed.
- 1904 June 15, GENERAL SLOCUM: excursion steamer burned in New York Harbor; 1,021 perished.
- 1915 July 24, EASTLAND: Great Lakes excursion steamer overturned in Chicago River; 812 died.
- 1934 Sept. 8, MORRO CASTLE: about 130 killed in fire off Asbury Park, N. J.
- 1939 May 23, Submarine SQUALUS: sank with 59 men off Hampton Beach, N. H.; 33 of the crew were rescued.
- 1943 June 6, ammunition ship collided with tanker off Norfolk; 84 died.
- 1945 April 9, U. S. ship, loaded with aerial bombs, exploded at Bari, Italy; at least 360 killed.
- 1947 Nov. 24-25, CLARKSDALE VICTORY: U. S. Army transport wrecked off British Columbia; 49 lost.
- 1950 Aug. 25, BENEVOLENCE: U. S. naval hospital ship sank off San Francisco after collision with freighter; 18 dead, 5 missing.

Aircraft Accidents

WORLD

- 1921 Aug. 24, ENGLAND: ZR-2, British dirigible, broke in two on trial trip near Hull; 62 died.
- 1930 Oct. 5, FRANCE: British dirigible, R-101, crashed at Beauvais; 47 died.
- 1935 May 18, U.S.S.R.: stunt flier crashed into giant land plane, the *Maxim Gorky*; 49 killed.
- 1938 July 24, COLOMBIA: military plane crashed into grandstand during air review at Bogotá, killing 53.
- 1947 Feb. 15, COLOMBIA: Avianca airliner crashed near Bogotá; 53 killed.
- 1947 Oct. 26, GREECE: Swedish airliner crashed on Mt. Hymettus, killing 45.
- 1948 Jan. 30, near BERMUDA: British airliner disappeared with 32 aboard.
- 1948 July 4, ENGLAND: Swedish airliner and R.A.F. transport collided near London; 32 aboard airliner and 7 aboard transport were killed.
- 1948 Aug. 1, ATLANTIC OCEAN: French flying boat with 52 aboard disappeared.
- 1949 July 12, near BOMBAY, INDIA: crash of Dutch airliner killed 13 U. S. journalists and 32 others.
- 1949 Oct. 28, AZORES: crash of French airliner killed 48.
- 1949 Nov. 20, near OSLO, NORWAY: airliner crash killed 34, including 27 children.
- 1950 March 12, near CARDIFF, WALES: crash of chartered airliner killed 80.
- 1950 June 12 (or 13), near BAHREIN, PERSIAN GULF: 47 reported killed or missing in crash of Air France plane; second plane of same line crashed nearby two nights later, killing about 40 (later reports gave total of 84).
- 1950 July 28, near PORTO ALLEGRE, BRAZIL: Brazilian airliner crash killed 49.

U. S. AND U. S. LINES

- 1925 Sept. 3, CALDWELL, OHIO: U. S. dirigible *Shenandoah* broke apart, killing 14.
- 1933 April 4, NEW JERSEY COAST: U. S. dirigible *Akron* crashed into sea; 73 died.
- 1937 May 6, LAKEHURST, N. J.: German zeppelin *Hindenburg* destroyed by fire at tower mooring; 36 died.
- 1946 Oct. 3, NEWFOUNDLAND: U. S. transatlantic airliner crashed near Stephenville; all 39 aboard killed.
- 1947 May 29, NEW YORK CITY: airliner crashed attempting takeoff; 43 died.
- 1947 May 30, BAINBRIDGE, MD.: all 49 passengers and four crew members killed in crash of airliner.
- 1947 June 13, near LEESBURG, VA.: Fifty killed in crash of airliner.
- 1947 Oct. 24, BRYCE CANYON, UTAH: airliner crashed into hillside after catching fire in midair; 52 killed.
- 1948 Jan. 28, near COALINGA, CAL.: chartered plane carrying Mexican deportees crashed; 32 killed.
- 1948 April 15, IRELAND: 30 died when transatlantic airliner crashed near Shannon airport.
- 1948 June 17, near MOUNT CARMEL, PA.: all 43 persons aboard airliner were killed as it crashed and burned.
- 1948 Aug. 29, near WINONA, MINN.: all 36 aboard airliner killed when it crashed into bluff.
- 1949 June 7, near SAN JUAN, PUERTO RICO: crash of converted army transport into ocean killed 53; 28 rescued.
- 1949 July 12, near LOS ANGELES, CALIF.: nonscheduled airliner hit mountain, killing 35 and injuring 14.
- 1949 Nov. 1, WASH., D. C.: fighter plane rammed airliner, killing 55.
- 1949 Nov. 29, DALLAS, TEX.: airliner coming in for landing crashed, killing 28.
- 1950 Jan. 27, YUKON, CANADA: U. S. Air Force plane disappeared with 44 aboard.
- 1950 April 21, near TOKYO, JAPAN: crash of U. S. Air Force transport killed 35.
- 1950 June 5, near BAHAMAS: transport carrying Puerto Rican laborers crashed; 28 dead, 37 survived.
- 1950 June 24, near ST. JOSEPH, MICH.: airliner disappeared over Lake Michigan, presumably after exploding; 58 dead.
- 1950 July 23, near MYRTLE BEACH, S. C.: 39 killed in crash of Air Force plane carrying National Guardsmen.
- 1950 July 27, near TOKYO, JAPAN: U. S. Air Force transport crashed in sea; 26, including several journalists, lost.
- 1950 Aug. 31, near CAIRO, EGYPT: crash of U. S. airliner killed 55, including 23 Americans.

Railroad Accidents

WORLD

- | | |
|---|---|
| <p>1857 March 17, DES JARDINES CANAL, CANADA: train derailed on bridge; about 60 killed.</p> <p>1864 June 29, near BELOEIL, CANADA: about 90 killed when train ran through open switch.</p> <p>1879 Dec. 28, DUNDEE, SCOTLAND: train blown off Tay bridge; 73 drowned.</p> <p>1881 June 24, near CUARTILA, MEXICO: about 200 died when train fell into river.</p> <p>1882 July 13, near TCHERNY, RUSSIA: more than 150 killed in derailment.</p> <p>1889 June 12, near ARMAGH, IRELAND: about 80 killed in collision.</p> <p>1891 June 14, near BASEL, SWITZERLAND: about 100 killed in collision.</p> <p>1915 May 22, GRETNA, SCOTLAND: two passenger trains and troop train collided; 227 killed.</p> | <p>1938 Dec. 25, near KISHINEV, RUMANIA: about 100 killed in collision.</p> <p>1939 Dec. 22, near MAGDEBURG, GERMANY: more than 125 killed in collision; 99 killed in another wreck near Friedrichshafen.</p> <p>1940 Jan. 29, OSAKA, JAPAN: 200 killed in collision.</p> <p>1944 Jan. 10(?), LEÓN PROVINCE, SPAIN: several hundred reported killed in tunnel wreck.</p> <p>1949 April 28, near JOHANNESBURG, SOUTH AFRICA: 3-train wreck killed about 75.</p> <p>1949 Oct. 22, near NOWY DWOR, POLAND: more than 200 reported killed in derailment of Danzig-Warsaw express.</p> <p>1950 April 6, near RIO DE JANEIRO, BRAZIL: train wrecked when bridge collapsed; 108 killed or missing.</p> |
|---|---|

UNITED STATES

- | | |
|--|---|
| <p>1856 July 17, near PHILADELPHIA, PA.: train carrying Sunday-school children wrecked; 66 killed.</p> <p>1876 Dec. 29, ASHTABULA, O.: 80 killed when train broke through bridge.</p> <p>1887 Aug. 10, near CHATSWORTH, ILL.: about 80 killed in wreck.</p> <p>1904 Aug. 7, near EDEN, COLO.: about 100 killed in wreck.</p> <p>1910 March 1, WELLINGTON, WASH.: more than 90 killed.</p> <p>1918 July 9, NASHVILLE, TENN.: more than 100 killed.</p> <p>1938 June 19, MILES CITY, MONT.: train ran through flood-weakened bridge; 47 killed.</p> <p>1940 July 31, CUYAHOGA FALLS, O.: collision killed 43.</p> <p>1943 Sept. 6, PHILADELPHIA, PA.: train derailed; 79 killed.</p> | <p>1943 Dec. 16, near RENNERT, N. C.: 72 killed in derailment and collision.</p> <p>1944 Dec. 31, near OGDEN, UTAH: 48 killed in collision.</p> <p>1946 April 25, NAPERVILLE, ILL.: at least 47 killed in collision.</p> <p>1950 Feb. 17, ROCKVILLE CENTRE, N. Y.: head-on crash of two commuter trains killed 30.</p> <p>1950 May 25, CHICAGO, ILL.: trolley collided with gasoline truck and caught fire; 34 killed.</p> <p>1950 July 6, near MONICA, ILL.: two trains running side by side collided; 9 dead.</p> <p>1950 Sept. 2, near MILWAUKEE, WIS: collision of interurban trains killed 10.</p> <p>1950 Sept. 11, near WEST LAFAYETTE, O.: streamliner rammed rear of troop train, killing 33 National Guardsmen.</p> |
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National Accidental-Death Rates

Country & (year)	Rate ¹	Country & (year)	Rate ¹
Australia (1947) ^{2,3}	51.6	Japan (1948)	49.3
Austria (1948)	62.3	Netherlands (1948) ³	33.4
Belgium (1948)	32.3	Norway (1946) ³	50.0
Canada (1948)	60.6	Rumania (1946) ³	52.6
Czechoslovakia (1947)	36.9	Scotland (1948)	43.2
England & Wales (1947)	36.3	South Africa, Union of (1946) ^{3,5}	43.7
France (1948) ⁴	49.4	Spain (1947) ³	35.3
Hungary (1946)	44.1	Sweden (1946)	39.2
Ireland (1947)	29.7	Switzerland (1946)	53.0
Italy (1948) ²	29.5	United States (1948)	67.1

¹ Deaths per 100,000 population. ² Includes legal executions. ³ Excludes full-blooded aboriginals. ⁴ Includes homicides and legal executions. ⁵ White population only. SOURCE: World Health Organization.

LEADING COUNTRIES OF THE WORLD IN VARIOUS RICHES AND RESOURCES

Source: *Encyclopaedia Britannica*.

(Footnotes at end of table. In designation "No data," relative rank of nation is estimated.)

MINERAL PRODUCTION	Country and rank									
	1	2	3	4	5	6	7	8	9	10
COAL (Millions of short tons, 1949)	U. S. 477	Germany 294 ¹	United Kingdom ² 241	U.S.S.R. 220 ¹	Poland 83 ¹	France 56	Japan 42	India 35	Belgium 31	U. of South Africa 28
CRUDE PETROLEUM (Millions of bbl., 1949)	U. S. 1,840	Venezuela 495	U.S.S.R. 250	Iran 196	Saudi Arabia 169	Kuwait 89	Mexico 63	Indonesia 32 ¹	Iraq 31	Colombia 30
COPPER (Thousands of short tons, smelter, 1949)	U. S. 906	Chile 387	Northern Rhodesia 289	U.S.S.R. 248	Canada 227	Belgium 147	Germany ² 113	Japan 82	Mexico 63 ⁴	U. of South Africa 33
IRON ORE (Millions of short tons, 1949)	U. S. 95.0	U.S.S.R. No data	France 34.6	Sweden 15.1	United Kingdom 15.0	Germany ⁶ 10.0	Luxemburg 4.6	Canada 3.8	Chile 3.0	Algeria 2.8
PIG IRON AND FERROALLOYS (Millions of short tons, 1949)	U. S. 54.1 ⁶	U.S.S.R. 18.5 ¹	United Kingdom 10.6	France ⁷ 9.2 ⁶	Germany ⁵ 7.9	Belgium 4.1	Luxemburg 2.6	Canada 2.4	Japan 1.8	Poland 1.2 ¹
TIN ORE (Thousands of short tons, 1949)	Malaya 61.3	Bolivia 38.1 ⁸	Indonesia 32.3	Belgian Congo 15.2	U.S.S.R. 9.9	Nigeria 9.9	Thailand 8.5	China 5.3 ¹	Australia 2.1 ¹	United Kingdom 1.3
ZINC (Thousands of short tons, smelter, 1949)	U. S. 869 ⁹	Canada 288 ⁹	Mexico 197 ¹⁰	U.S.S.R. 187	Belgium 187	Poland 96 ¹	Australia 91 ¹¹	United Kingdom 72	France 68	Germany ⁸ 46
LEAD (Thousands of short tons, smelter, 1949)	U. S. 541 ¹²	Mexico 243 ¹⁰	Australia 206 ¹²	U.S.S.R. 171	Canada 160 ¹²	Germany ⁸ 114	Belgium 87	France 57	Peru 38 ¹	Spain 30
BAUXITE (Thousands of short tons, 1948)	Surinam 2,365	British Guiana 2,090	U. S. 1,629	France 869	U.S.S.R. 550	Indonesia 482	Hungary 330	Italy 176	Gold Coast 145	Yugoslavia No data
ANTIMONY (Thousands of short tons, 1948)	Bolivia 12.4	Mexico 7.5	U. S. 6.0	U. of South Africa 4.1	China 3.6	Peru 1.8	Czechoslovakia 1.7	Algeria .9	Turkey .6	U.S.S.R. No data

Leading Countries of the World in Various Riches and Resources (Cont.)

MINERAL PRODUCTION	Country and rank									
	1	2	3	4	5	6	7	8	9	10
CHROMITE (Thousands of short tons, 1948)	U. of South Africa 454	U.S.S.R. No data	Turkey 313	Philippines 283	Southern Rhodesia 254	Cuba 123	New Caledonia 83	India ¹⁴ 39 ¹³	Japan 10	Sierra Leone 9
MANGANESE (Thousands of short tons, 1948)	U.S.S.R. 2,000	Gold Coast 704	India ¹⁴ 502 ¹³	U. of South Africa 304	French Morocco 236	Brazil 155	U. S. 130	Mexico 59	Japan 52	Hungary 37 ¹³
GOLD (Thousands of fine ounces, refinery production, 1948)	U. of South Africa 11,584	U.S.S.R. 7,000	Canada 3,525	U. S. 2,025	Australia 890	Gold Coast 672	Southern Rhodesia 514	Mexico 368	Belgian Congo 300	India 172
SILVER (Millions of fine ounces, smelter, 1948)	Mexico 57.5	U. S. 39.2	Canada 14.6	Peru 10.4	Australia 10.0	Bolivia 7.6	Belgian Congo 3.8	Honduras 3.1	Argentina 1.2	U.S.S.R. No data

URANIUM: The most important deposits are probably in Belgian Congo and Northwest Territories, Canada. Deposits are also found or reported in Argentina, Australia, Brazil, Bulgaria, Burma, Ceylon, Chile, China (Manchuria), Czechoslovakia, England, Finland, France, Germany, Greenland, Hungary, Indonesia, India, Madagascar, Mexico, Mozambique, Norway, Portugal, Sardinia, South Africa (Union of), Spain, Sweden, U.S.S.R. and United States. No production data are available.

AGRICULTURE	Country and rank									
	1	2	3	4	5	6	7	8	9	10
ARABLE LAND (Millions of acres, including orchards, latest data available)	U.S.S.R. 556	U. S. 438	India 244	China 225	Argentina 75	Pakistan 52	France 52	Iran 50	Turkey 49	Brazil 47
MILK (Millions of U. S. gallons, 1949)	U. S. 13,850	U.S.S.R. No data	Germany ⁶ 3,000	France 2,750	United Kingdom 2,085 ¹⁵	Canada 1,950	Australia 1,450 ¹¹	Denmark 1,250	Netherlands 1,150	Sweden 850
BUTTER (Thousands of short tons, creamery and factory, 1949)	U. S. 702	Germany ⁶ 260	U.S.S.R. No data	France 198 ¹	New Zealand 185 ¹¹	Australia 180 ¹¹	Denmark 172	Canada 140	Sweden 108	Netherlands 92 ¹³
CHEESE (Thousands of short tons, creamery and factory, 1949)	U. S. 595	Italy 261 ¹	France 209 ¹	U.S.S.R. No data	Germany ⁶ 170	Netherlands 141	New Zealand 111 ¹¹	Argentina 91 ¹³	Sweden 72	Denmark 70
MEAT (Thousands of short tons, 1949)	U. S. 7,800 ¹⁷	U.S.S.R. No data	Argentina 1,600 ¹¹ , ¹⁸	Australia 1,085 ¹¹	Poland 770 ¹¹ , ¹⁷	Canada 664 ¹⁷	Denmark 433	New Zealand 370 ¹¹ , ⁸	Germany ⁶ 336 ¹	Belgium 317
WHEAT (Thousands of short tons, 1949)	U. S. 34,300	U.S.S.R. 33,000	China 24,600	Canada 11,000	France 8,700	Italy 7,600	Australia 6,500	India 6,000	Argentina 6,000	Pakistan 4,500

OATS (Thousands of short tons, 1949)	U. S.	U. S.S.R.	Canada	France	Germany ⁶	United Kingdom	Poland	Czechoslovakia	Denmark	Sweden
	21,150	13,100 ¹³	5,380	3,440	3,360 ¹⁹	3,180	2,640 ¹	1,220	1,080	940
CORN (MAIZE) (Thousands of short tons, 1949)	U. S.	China	Brazil	Rumania	Argentina	Yugoslavia	U. S.S.R.	Hungary	Mexico	Italy
	94,400	7,130	6,060 ¹	5,810 ¹³	5,500 ¹	4,570	3,500 ¹³	3,150 ¹	2,770	2,510
POTATOES (Thousands of short tons, 1949)	U. S.S.R.	Poland	Germany ⁶	U. S.	France	United Kingdom	Czechoslovakia	Netherlands	Spain	Hungary
	83,600	32,500	22,960	11,580	11,470	9,900	6,890	4,730	4,180	2,990 ²⁰
RICE (Thousands of short tons, 1949)	China	India	Pakistan	Japan	Java, Madura	Thailand	Indo-China	Burma	Indonesia ¹¹	South Korea
	48,950	31,620 ¹	14,130 ¹	12,670	6,820	6,190	6,050	4,590	4,170	3,250
SUGAR BEETS (Thousands of short tons, 1949)	U. S.S.R.	U. S.	Germany	France	Poland	Czechoslovakia	United Kingdom	Italy	Netherlands	Denmark
	No data	10,040	8,590	7,360	5,650	4,890	3,860	3,630	2,850	2,340 ²¹
COTTON, GINNED (Thousands of short tons, 1949)	U. S.	U. S.S.R.	India	China	Egypt	Brazil	Mexico	Pakistan	Turkey	Argentina
	3,825	No data	572	407	406	406	237	229	107	102
CATTLE (Number in thousands, latest data available)	India	U. S.	U. S.S.R.	Brazil	Argentina	Pakistan	China	Ethiopia	France	Australia
	136,369 ²²	78,298 ^{24, 25}	52,000 ¹³	45,000 ¹	41,268 ¹²	24,296 ²⁸	18,200 ¹	15,750 ²⁶	15,434 ¹	14,115 ²⁵
SHEEP (Number in thousands, latest data available)	Australia	U. S.S.R.	Argentina	India	New Zealand	U. of South Africa	U. S.	Turkey	Uruguay	Spain
	108,500 ²⁵	64,800 ¹	54,800 ¹	37,731 ²³	32,845 ²⁵	32,612 ¹	31,654 ^{24, 25}	25,840 ¹	22,000 ¹	19,500 ¹³
HOGS (Number in thousands, latest data available)	China	U. S.	Brazil	U. S.S.R.	Germany	France	Mexico	Spain	Poland	Canada
	59,510 ¹	57,139 ^{24, 25}	23,815 ¹⁴	13,400 ¹³	9,430 ¹	6,288 ¹	5,704 ²⁵	4,700 ²⁷	4,626 ¹	4,500 ^{24, 25}
HORSES (Number in thousands, latest data available)	U. S.S.R.	Argentina	Brazil	U. S.	Mexico	France	Poland	Germany	China	Canada
	10,800 ^{24, 27}	7,238 ¹³	6,770 ¹³	5,921 ^{24, 25}	2,722 ²⁵	2,418 ^{1, 28}	2,307 ¹	2,295 ¹	2,023 ¹	1,796 ^{24, 25}
WOOL (Thousands of short tons, greasy basis, 1949)	Australia	Argentina	New Zealand	U. S.	U. S.S.R.	U. of South Africa ²⁹	Uruguay	United Kingdom	China	Spain
	521	220	184	135	135	107	77	40	39	39
RUBBER (Thousands of short tons, 1949)	Malaya	Indonesia	U. S.	Thailand	Ceylon	North Borneo ¹¹	Canada	U. S.S.R.	Indo-China	Liberia
	751	482	440 ²⁰	105 ³	100	67 ³	52 ²⁰	No data	47	32 ⁸

Leading Countries of the World in Various Riches and Resources (Cont.)

	Country and rank									
	1	2	3	4	5	6	7	8	9	10
AGRICULTURE										
FORESTS (Millions of acres, 1947-48)	U.S.S.R. 1,551	Brazil 979	Canada 826	U. S. 616	French West Africa 420	French Eq. Africa 377	Indonesia 299	Belgian Congo 297	Anglo-Egyptian Sudan 233	China 207
INDUSTRY, COMMERCE, COMMUNICATIONS										
INDUSTRIAL PRODUCTION INDEX, 1949 (1937 = 100)	Canada 171	U.S.S.R. 165 ^{as}	Chile 163 ¹	U. S. 156	Sweden 147	Finland 143	Poland 141 ¹ , ^{as}	Denmark 137	Norway 132	Mexico 131 ¹
EMPLOYMENT (NONAGRICULTURAL) INDEX, 1949 (1937 = 100)	Canada 172	Australia 141 ^{as}	U. S. 140	U. of South Africa 134	Austria 130 ¹	France 109	Norway 109 ^{as}	Luxemburg 108	Hungary 106 ¹	United Kingdom ² 101
STEEL (Production in thousands of short tons, 1949)	U. S. 77,900	U.S.S.R. 22,200 ¹	United Kingdom 17,400	Germany ⁶ 10,100	France 10,000 ⁷	Belgium 4,200	Japan 3,400	Canada 3,200	Czechoslovakia 2,900	Luxemburg 2,500
ALUMINUM (Production in thousands of short tons, 1948)	U. S. 623.5	Canada 367.1	U.S.S.R. 154.3	France 71.4	Italy 36.5	United Kingdom 33.6	Norway 33.1	Switzerland 20.9	Austria 14.7	Germany 8.0
ELECTRICITY (Production in billions of kwh., 1949)	U. S. 271	U.S.S.R. 60 ¹	United Kingdom ² 49	Canada 47	Japan 36	Germany ⁶ 31	France 28	Italy 20	Sweden 16	Norway 15
MOTOR VEHICLES (Production in thousands, 1949)	U. S. 6,250 ^{as}	United Kingdom 629	Canada 325	France 198	Italy No data	U.S.S.R. No data	Germany ⁵ 37	Czechoslovakia 26	Japan 15 ⁷	Spain No data
EXPORT INDEX, 1949 (1937 = 100)	U. S. 203	Turkey 138	United Kingdom 134	France 132 ^{as}	Ceylon 128 ¹⁰	U.S.S.R. No data	Switzerland 125 ^{as}	Australia 121 ¹¹	Poland 99 ¹ , ^{as}	Netherlands 96 ^{as}
IMPORT INDEX, 1949 (1937 = 100)	Chile 186	Turkey 166	Indo-China 162	Australia 138 ¹¹	Poland 135 ¹ , ^{as}	U.S.S.R. No data	Ireland 122	Switzerland 119 ^{as}	Norway 107	U. S. 105
TELEPHONES (Number per 100 population, 1949)	U. S. 26.1	Sweden 22.1	Canada 18.8	New Zealand 17.2	Switzerland 17.2	Denmark 15.3	Australia 12.8	Iceland 12.8	Norway 12.7 ¹	United Kingdom 9.8

RAILWAYS (Thousands of freight tons carried, monthly average, 1949)	U. S.	U. S. S. R.	United Kingdom ²	Germany ²	France	Canada	India	Japan	Poland	Czechoslovakia
	174,760 ¹⁰	No data	23,740	18,285	13,377 ¹¹	11,556 ¹²	9,874 ¹³	9,790 ¹⁴	9,522 ¹⁵	5,631 ¹⁶
AIRLINES (Millions of passenger-miles, monthly average, 1949)	U. S.	Australia	United Kingdom	France	U. S. S. R.	Canada	Netherlands	Mexico	India	Belgium
	768	58 ¹⁷	51	51	No data	38	31	29	15	9 ¹⁸
MERCHANT FLEETS (Thousands of gross tons, 1949) ¹⁴	U. S.	British Commonwealth	Norway	Panamá	Netherlands	France	Italy	Sweden	U. S. S. R.	Greece
	25,977 ¹⁵	18,867	4,416	2,948	2,683	2,621	2,142	1,792	1,324	1,256
HIGHEST ANNUAL BIRTH RATES (Per 1,000 population, 1949) ¹⁶	U. S. S. R.	Mexico	Japan	China	U. of South Africa	Canada ¹⁸	India	U. S.	Netherlands	Australia
	No data	45.4	33.4	No data	26.7 ¹⁷	26.6	26.4	24.1	23.7	22.9
LOWEST ANNUAL DEATH RATES (Per 1,000 population, 1949) ¹⁸	Netherlands	Norway	Denmark	Canada ¹⁸	U. of South Africa	Australia	U. S.	Sweden	Germany ¹⁹	Italy
	8.2	8.8	8.9	9.1	9.2 ¹⁷	9.5	9.7	10.1	10.1	10.4
MILITARY FORCES (Unofficial estimates)										
ARMED FORCES (Army, air, navy, strength in thousands, 1949)	China	U. S. S. R.	U. S.	United Kingdom	France	Turkey	Spain	India	Yugoslavia	Italy
	4,500 ²⁰	4,050	1,655	800	685	675 ²¹	600	450 ²²	375	270
AIR FORCES (Number of planes, 1949)	U. S.	U. S. S. R.	United Kingdom	Yugoslavia	Turkey	Spain	France	Portugal	Sweden	Poland
	32,500	25,000	6,000	1,500	1,050 ²³	950 ²⁴	750	575	500 ²⁵	400

¹⁰ Milk sold through Milk Marketing Schemes.

¹¹ Excluding Northern Ireland.

¹² Excluding Northern Ireland.

¹³ Copper content of ores mined.

¹⁴ Three western zones.

¹⁵ Excluding alloys made in electric furnaces.

¹⁶ Excluding Saar.

¹⁷ Excluding zinc and exports of ore and concentrates.

¹⁸ Exports of ore.

¹⁹ Twelve months ending June 30 of year stated.

²⁰ Including ores and concentrates exported.

²¹ 1947.

²² Republic of India and Pakistan; separate figures unavailable.

²³ Synthetic only.

²⁴ Including Sarawak and Brunel.

²⁵ 1948—first nine months.

²⁶ 1938 = 100, pre-World War II territory.

²⁷ July, 1939 = 100.

²⁸ 1941 = 100.

²⁹ Factory sales.

³⁰ Excluding vehicles only.

³¹ 1938 = 100.

³² 1934-35 = 100.

³³ Class I railways.

³⁴ State railways.

³⁵ Including nonrevenue passengers.

³⁶ Including Belgian Congo.

³⁷ Ships of 1,000 gross tons or over.

³⁸ Following vessels on Great Lakes.

³⁹ Following smaller countries not included (1949 figures unless otherwise noted).

⁴⁰ El Salvador (41.2 in 1947); Costa Rica (41.0); Venezuela (40.9 in 1948); Cuba (38.9); Puerto Rico (39.1); Dominican Republic (38.1); Chile (35.2); Panamá (33.0); Israel (29.4); Jewish population only; Finland (25.1); New Zealand (24.9).

⁴¹ European population only.

⁴² Excluding Newfoundland.

⁴³ Following smaller countries not included (all 1949 figures): Israel (6.8); Jewish population only, excluding war casualties; Peru (6.1); New Zealand (9.1); Peru (9.2); Dominican Republic (9.4); Puerto Rico (10.7).

⁴⁴ Peoples Liberation (Communist) army; Nationalist forces estimated at 300,000 in mid-1950.





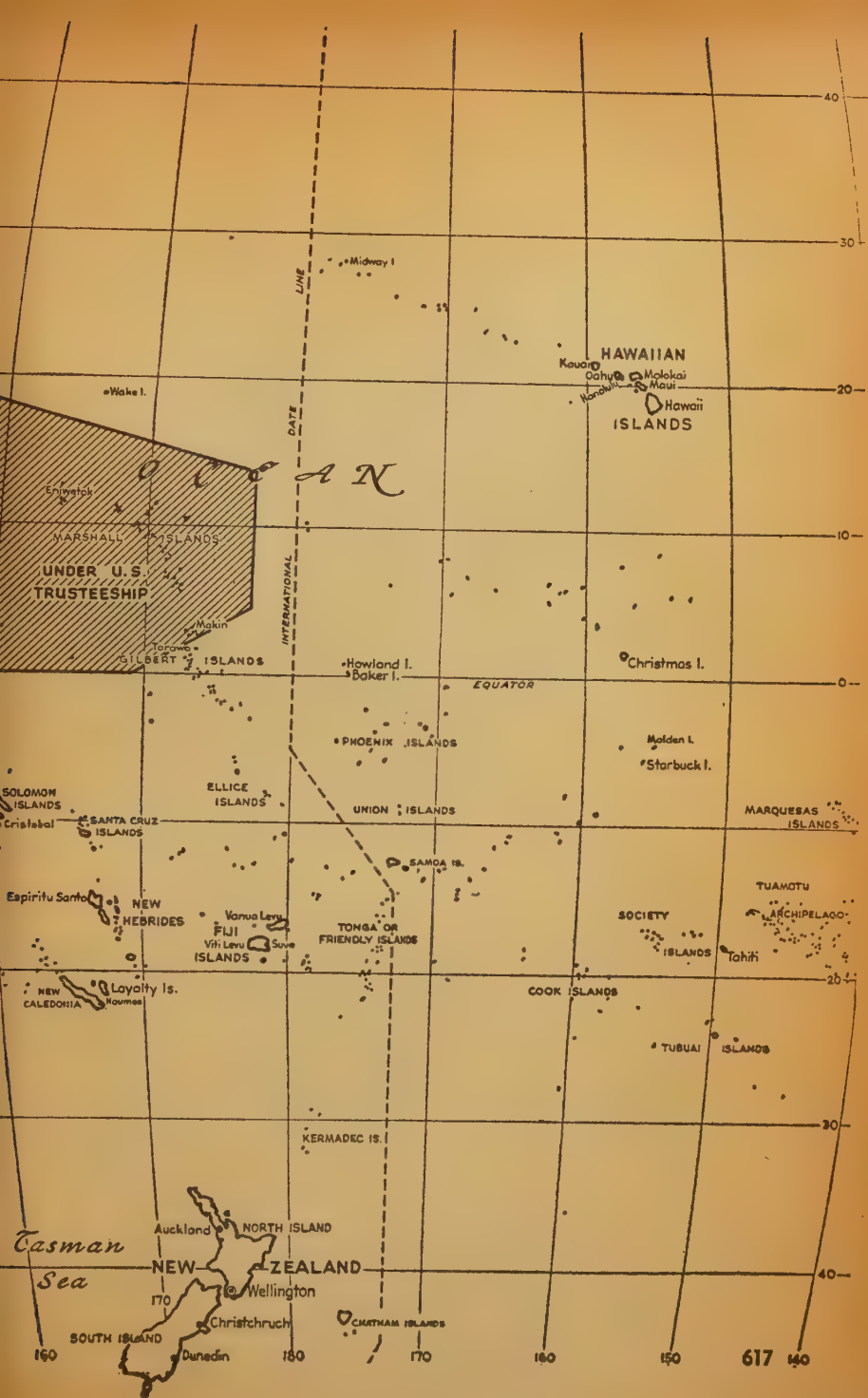














SCIENCE



MEASURES AND WEIGHTS

UNITS OF LENGTH

Metric System

The meter was originally intended to be one ten-millionth of the earth's quadrant, a quadrant being one-quarter of a circumference. However, because of the difficulty of determining such a length with accuracy, this definition was abandoned. The meter is now considered to be the distance at 0°C between two microscopic marks on the International Prototype Meter, a platinum-iridium bar, kept by the International Bureau of Weights and Measures at Sèvres, France, a suburb of Paris.

In 1927, the International Conference on Weights and Measures adopted a secondary definition of the meter in terms of light-waves. According to this definition, one meter is equivalent to 1,553,164.13 wave lengths of the red light from cadmium.

Unit	Comparison	English equivalent
Millimeter (mm)	.001 meter	.0394 inch
Centimeter (cm)	.01 meter	.3937 inch
Decimeter (dm)	.1 meter	3.937 inches
Meter (m)		3.2808 feet
Dekameter (dkm)	10 meters	32.8083 feet
Hectometer (hm)	100 meters	328.0833 feet
Kilometer (km)	1000 meters	.62137 mile

English System

According to legend, the yard was established by Henry I as the distance from the point of his nose to the end of his thumb when his arm was outstretched. The British Imperial Yard was defined in 1878 by the Weights and Measures Act as the distance at 62°F between two fine lines on gold studs sunk in a bronze bar known as the "No. 1 Standard Yard." This is equivalent to .914399 meter. In the United States, the yard is defined in terms of the meter, using as a standard the U. S. Prototype Meter. According to this definition, the yard is 3600/3937 (or .914402) meter, slightly longer than the British Imperial Yard.

Unit	Comparison	Metric equivalent
Inch (in.)		25.4001 millimeters
Foot (ft)	12 inches	.3048 meter
Yard (yd)	36 inches	.9144 meter
	3 feet	
Rod (rd)	16½ feet	5.0292 meters
	5½ yards	
Furlong (fur.)	660 feet	201.1684 meters
	220 yards	
	40 rods	
Mile (mi)*	5280 feet	1.6093 kilometers
	1760 yards	
	320 rods	
	8 furlongs	

* Known as statute mile. See nautical mile under Miscellaneous Units.

UNITS OF AREA

Metric System

Unit	Comparison	English equivalent
Square millimeter (mm²)	.000001 m²	.0015 sq in.
Square centimeter (cm²)	.0001 m²	.155 sq in.
Square decimeter (dm²)	.01 m²	15.5 sq in.
square meter (m²)*		10.7639 sq ft
Square dekameter (dkm²)†	100 m²	3.9537 sq rd
Square hectometer (hm²)‡	10,000 m²	2.471 acres
Square kilometer (km²)	1,000,000 m²	.3861 sq mi

English System

Unit	Comparison	Metric equivalent
Square inch (sq in.)		6.4516 cm²
Square foot (sq ft)	144 sq in.	.0929 m²
Square yard (sq yd)	1296 sq in.	.8361 m²
	9 sq ft	
Square rod (sq rd)	272¼ sq ft	25.293 m²
	30¼ sq yds	
Acre	43,560 sq ft	.4047 ha
	4,840 sq yd	
	160 sq rd	
Square mile (sq mi)	27,878,400 sq ft	2.5900 km²
	3,097,600 sq yd	
	102,400 sq rd	
	640 acres	

* Also known as a centare (ca).

† Also known as an are (a).

‡ Also known as a hectare (ha).

UNITS OF VOLUME

Metric System

Unit	Comparison	English equivalent
Cubic millimeter (mm³)	.000000001 m³	.00006 cu in.
Cubic centimeter (cm³)	.000001 m³	.061 cu in.
Cubic decimeter (dm³)	.001 m³	61.0234 cu in.
Cubic meter (m³)*		35.3145 cu ft

* Also known as a stere (s).

English System

Unit	Comparison	Metric equivalent
Cubic inch (cu in.)		16.3872 cm³
Cubic foot (cu ft)	1728 cu in.	.0283 m³
Cubic yard (cu yd)	46,656 cu in.	.7646 m³
	27 cu ft	
Cord (cd)	128 cu ft	3.6246 m³

UNITS OF WEIGHT OR MASS

The term *mass* denotes the amount of matter contained in an object, while the term *weight* denotes the gravitational pull of the earth on the object. For practical purposes, the two terms are synonymous.

Metric System

The gram was originally intended to be equal to the mass of one cubic centimeter of pure water at 4°C. However, because of

the difficulty of making exact measurement, a small error was made; and it has since been found that a kilogram of pure water occupies 1.000028 cubic decimeters. The standard for the kilogram is a platinum-iridium cylinder, called the International Prototype Kilogram, which is kept at the International Bureau of Weights and Measures in France.

Unit	Comparison	Avdp.	English equivalents	
			Troy	Apoth.
Milligram (mg)	.001 gram	.0154 grain	.0154 grain	.0154 grain
Centigram (cg)	.01 gram	.1543 grain	.1543 grain	.1543 grain
Decigram (dg)	.1 gram	1.5432 grains	1.5432 grains	1.5432 grains
Gram (g)		.0353 ounce	.0322 ounce	.0322 ounce
Dekagram (dkg)	10 grams	.3527 ounce	.3215 ounce	.3215 ounce
Hectogram (hg)	100 grams	3.5274 ounces	3.2151 ounces	3.2151 ounces
Kilogram (kg)	1000 grams	2.2046 pounds	2.6792 pounds	2.6792 pounds
Metric ton (t)	1000 kg	1.1023 tons*		

* Short tons. A metric ton is equivalent to .9842 long ton.

English System

The English System is complicated by the existence of three different kinds of weight: *avoirdupois weight*, used for common purposes; *troy weight*, used for weighing gold, silver, etc.; and *apothecaries weight*, used for making up medical prescriptions.

The British Imperial Pound (avoirdupois) is defined as the mass of a pure plat-

inum cylinder kept by the Standards Department of the Board of Trade. In the United States, the pound (avoirdupois) is defined in terms of the kilogram, using as a standard the U. S. Prototype Kilogram. According to this definition, the pound is equal to .4535924277 kilogram, making it infinitesimally smaller than the British Imperial Pound.

Avoirdupois Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Dram (dr avdp)	27.3438 grains	1.7718 grams
Ounce (oz avdp)	16 drams	28.3495 grams
	437.5 grains	
Pound (lb avdp)	7000 grains	.4536 kilogram
	256 drams	
	16 ounces	
Hundredweight (cwt)*	100 pounds	45.3592 kilograms
Ton (tn)†	2000 pounds	.9072 metric ton

* Known as the short hundredweight, which is in use in the United States and Canada. Great Britain uses the long hundredweight (112 lb or 50.8024 kg).

† Known as the short ton, which is in use in the United States and Canada. Great Britain uses the long ton (2240 lb or 1.01605 metric tons).

Troy Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Pennyweight (dwt)	24 grains	1.5552 grams
Ounce (oz t)	480 grains	31.1035 grams
	20 pennyweights	
Pound (lb t)*	5760 grains	.3732 kilogram
	240 pennyweights	
	12 ounces	

* Declared illegal in Great Britain.

Apothecaries Weight

Grain		.0648 gram
Scruple (s ap or ℥)	20 grains	1.296 grams
Dram (dr ap or ℥)	60 grains	3.8879 grams
	3 scruples	
Ounce (oz ap or ℥)	480 grains	31.1035 grams
	24 scruples	
	8 drams	
Pound (lb ap)	5760 grains	.3732 kilogram
	288 scruples	
	96 drams	
	12 ounces	

UNITS OF CAPACITY

Metric System

The liter is a secondary unit of capacity defined as the volume occupied by one kilogram of pure water at 4°C. It was intended that the liter should exactly equal one cubic decimeter, but as an error was made in measurement, has since been found to equal 1.000028 cubic decimeters.

Unit	Comparison	English equivalents	
		Liquid	Dry
Milliliter (ml)	.001 liter	.0338 fl oz	.0018 pt
Centiliter (cl)	.01 liter	.3381 fl oz	.0182 pt
Deciliter (dl)	.1 liter	3.3815 fl oz	.1816 pt
Liter (l)		1.0567 qt	.9081 qt
Dekaliter (dkl)	10 liters	2.6418 gal	1.3511 pk
Hectoliter (hl)	100 liters	26.4178 gal	2.8378 bu

English System

In Great Britain, the standard unit of capacity for measuring both liquid and dry commodities is the British Imperial Gallon. It is defined as the volume of ten pounds of pure water at 62°F and contains 277.418 cubic inches. The bushel is defined as eight gallons (2218.192 cubic inches).

In the United States, there are two separate standards. The unit for measuring liquids is the gallon, which is defined as 231 cubic inches; the unit for measuring dry commodities is the bushel, which is defined as 2150.42 cubic inches.

Liquid Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Minim (min or m)*		.0038	.0616 ml
Fluid dram (fl dr)	60 min	.2256	3.6966 ml
Fluid ounce (fl oz)	8 fl dr	1.8047	29.5729 ml
Gill (gi)	32 fl dr	7.2188	118.292 ml
	4 fl oz		
Pint (pt)	16 fl oz	28.875	.4732 liter
	4 gi		
Quart (qt)	32 fl oz	57.75	.9463 liter
	8 gi		
	2 pt		
Gallon (gal)	32 gi	231	3.7853 liters
	8 pt		
	4 qt		

* Approximately one drop.

UNITS OF CIRCULAR MEASURE

Unit	Comparison
Second (")	
Minute (')	60 seconds
Degree (°)	60 minutes
Right angle	90 degrees
Straight angle	180 degrees
Circle	360 degrees

Dry Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Pint (pt)		33.6003	.5506 liter
Quart (qt)	2 pints	67.2006	1.1012 liters
Peck (pk)	16 pints	537.605	8.8096 liters
	8 quarts		
Bushel (bu)	64 pints	2150.42	35.2383 liters
	32 quarts		
	4 pecks		

COMMON FORMULAS

Circumference

Circle: $C = \pi d$, in which π is 3.1416 and d the diameter.

Area

Triangle: $A = \frac{ab}{2}$, in which a is the base and b the height.

Square: $A = a^2$, in which a is one of the sides.

Rectangle: $A = ab$, in which a is the base and b the height.

Trapezoid: $A = \frac{h(a+b)}{2}$, in which h is the height, a the longer parallel side, and b the shorter.

Regular pentagon: $A = 1.720a^2$, in which a is one of the sides.

Regular hexagon: $A = 2.598a^2$, in which a is one of the sides.

Regular octagon: $A = 4.828a^2$, in which a is one of the sides.

Circle: $A = \pi r^2$, in which π is 3.1416 and r the radius.

Volume

Cube: $V = a^3$, in which a is one of the edges.

Rectangular prism: $V = abc$, in which a is the length, b the width, and c the depth.

Pyramid: $V = \frac{Ah}{3}$, in which A is the area of the base and h the height.

Cylinder: $V = \pi r^2 h$, in which π is 3.1416, r the radius of the base, and h the height.

Cone: $V = \frac{\pi r^2 h}{3}$, in which π is 3.1416, r the radius of the base, and h the height.

Sphere: $V = \frac{4\pi r^3}{3}$, in which π is 3.1416 and r the radius.

Miscellaneous

Speed per second acquired by falling body: $v = 32t$, in which t is the time in seconds.

Distance in feet traveled by falling body: $d = 16t^2$, in which t is the time in seconds.

Speed of sound in feet per second through any given temperature of air:

$V = \frac{1087\sqrt{273+t}}{16.52}$, in which t is the temperature Centigrade.

Cost per hour of operation of electrical device: $C = \frac{Wtc}{1000}$, in which W is the number of watts, t the time in hours, and c the cost per kilowatt-hour.

Conversion of matter into energy (Einstein's Theorem): $E = mc^2$, in which E is the energy in ergs, m the mass of the matter in grams, and c the speed of light in centimeters per second. ($c^2 = 9 \cdot 10^{20}$).

Abbreviations

The National Bureau of Standards recommends that the period be omitted after all abbreviations of units unless the

abbreviation forms an English word, and that the same abbreviation be used for both singular and plural.

FAHRENHEIT AND CENTIGRADE SCALES

Zero on the Fahrenheit scale represents the temperature produced by the mixing of equal weights of snow and common salt.

Absolute zero is theoretically the lowest possible temperature, the point at which all molecular motion would cease.

	F	C
Boiling point of water	212°	100°
Freezing point of water	32°	0°
Absolute zero	-459.6°	-273.1°

To convert Fahrenheit to Centigrade, subtract 32 and multiply by 5/9.

To convert Centigrade to Fahrenheit, multiply by 9/5 and add 32.

ROMAN NUMERALS

Roman numerals are expressed by letters of the alphabet and are rarely used today except for formality or variety.

There are three basic principles for reading Roman numerals:

1. A letter repeated once or twice repeats its value that many times. (XXX=30, CC=200, etc.).

2. One or more letters placed after another letter of greater value increases the greater value by the amount of the smaller. (VI=6, LXX=70, MCC=1200, etc.).

3. A letter placed before another letter of greater value decreases the greater value by the amount of the smaller. (IV=4, XC=90, CM=900, etc.).

Letter	Value	Letter	Value
I	1	LX	60
II	2	LXX	70
III	3	LXXX	80
IV	4	XC	90
V	5	C	100
VI	6	D	500
VII	7	M	1,000
VIII	8	V	5,000
IX	9	X	10,000
X	10	L	50,000
XX	20	C	100,000
XXX	30	D	500,000
XL	40	M	1,000,000
L	50		

SIMPLE INTEREST FOR \$100

To find the interest for any amount of money, move the decimal point of that amount two places to the left and multi-

ply by the figure obtained from the table.

For figuring simple interest, the year is considered to have 360 days.

	1 Day	7 Days	1 Month	3 Months	6 Months	1 Year
2%	\$.00556	\$.03889	\$.16667	\$.50000	\$1.00000	\$2.00000
2½%	.00694	.04861	.20833	.62500	1.25000	2.50000
3%	.00833	.05833	.25000	.75000	1.50000	3.00000
3½%	.00972	.06806	.29167	.87500	1.75000	3.50000
4%	.01111	.07778	.33333	1.00000	2.00000	4.00000
4½%	.01250	.08750	.37500	1.12500	2.25000	4.50000
5%	.01389	.09722	.41667	1.25000	2.50000	5.00000
5½%	.01528	.10694	.45833	1.37500	2.75000	5.50000
6%	.01667	.11667	.50000	1.50000	3.00000	6.00000
6½%	.01806	.12639	.54167	1.62500	3.25000	6.50000
7%	.01944	.13611	.58333	1.75000	3.50000	7.00000
8%	.02222	.15556	.66667	2.00000	4.00000	8.00000
9%	.02500	.17500	.75000	2.25000	4.50000	9.00000
10%	.02778	.19444	.83333	2.50000	5.00000	10.00000

MISCELLANEOUS UNITS

AGATE: Originally a measurement of type size (5½ points). Now equal to 1/14 inch. Used in printing for measuring column length.

ANGSTROM (A or λ): .0001 micron or .0000001 mm. Used for measuring length of light waves.

ASTRONOMICAL UNIT (A.U.): 93,003,000 miles, the average distance of the earth from the sun. Used in astronomy.

BALE: A large bundle of goods. In the U. S., the approximate weight of a bale of cotton is 500 pounds. The weight varies in other countries.

- BARREL (bbl):** For liquids, 31½ gallons or 7326.5 cubic inches. For dry commodities, except cranberries: 105 dry quarts or 7056 cubic inches. For cranberries: 5826 cubic inches.
- BOARD FOOT (fbm):** 144 cubic inches (12 in. x 12 in. x 1 in.). Used for lumber.
- BOLT:** 40 yards. Used for measuring cloth.
- CABLE:** About 100 fathoms or 600 feet. Used for measuring lengths of cable.
- CARAT (c):** 200 milligrams or 3.086 grains troy. Originally the weight of a seed of the carob tree in the Mediterranean region. Used for weighing precious stones. Also a measure of the purity of gold alloy, indicating how many parts out of 24 are pure. Eighteen carat gold, for example, is ¾ pure.
- CHAIN (ch):** a chain 66 feet or one-tenth of a furlong in length, divided into 100 parts called links. One mile is equal to 80 chains. Used in surveying and sometimes called Gunter's chain.
- CUBIT:** 18 inches or 45.72 cm. Derived from distance between elbow and tip of middle finger.
- ELL, ENGLISH:** 1¼ yards or 1/32 bolt. Used for measuring cloth.
- FATHOM (fath):** 6 feet or 1.8288 m. Derived from the distance to which a man can stretch his arms. Used for measuring cables and depths of water.
- FREIGHT TON (also called MEASUREMENT TON):** 40 cubic feet of merchandise. Used for cargo freight.
- GREAT GROSS:** 12 gross or 1728.
- GROSS:** 12 dozen or 144.
- HAND:** 4 inches or 10.16 cm. Derived from the width of the hand. Used for measuring the height of horses at withers.
- HOGSHEAD (hhd):** 2 liquid barrels or 14.653 cubic inches.
- HORSEPOWER:** The power needed to lift 33,000 pounds a distance of one foot in one minute (about 1½ times the power an average horse can exert). Used for measuring the power of steam engines, etc.
- KNOT:** Not a distance, but the rate of speed of one nautical mile per hour. Used for measuring speed of ships.
- LEAGUE:** Rather indefinite and varying measure, but usually estimated at 3 miles in English-speaking countries.
- LIGHT-YEAR:** 5,880,000,000,000 miles, the distance light travels in a year at the rate of 186,273 miles per second. (If an astronomical unit were represented by one inch, a light-year would be represented by about one mile.) Used for measurements in interstellar space.
- LINK:** One-hundredth of a chain or 7.92 inches. Used in surveying.
- MAGNUM:** Two-quart bottle. Used for measuring wine, etc.
- MICRON (μ):** .001 millimeter. Used for scientific measurements.
- MIL:** .001 inch. Used for measuring size of wire. The area of a cross-section of wire is usually expressed in circular mils, a circular mil being the area of a circle one mil in diameter. A wire one inch in diameter has a cross-section area of one million circular mils.
- MILLIMICRON (mμ):** .001 micron or .000001 mm. Used for scientific measurements.
- NAUTICAL MILE (also called GEOGRAPHICAL or SEA MILE):** Equal to a minute or 1/21600 of a great circle of the earth. Length varies in different countries. In Great Britain, it is 6080 feet or 1853.2 meters, and in the United States, it is 6080.2 feet or 1853.248 meters. The International Hydrographic Bureau proposed in 1929 a length of 1852 meters or 6,076.097 feet, which has been adopted by several countries.
- PARSEC:** Approximately 3.26 light-years or 19.2 trillion miles. Term is combination of first syllables of *parallax* and *second*, and distance is that of imaginary star when lines drawn from it to both earth and sun form a maximum angle or parallax of one second (1/3600 degree). Used for measuring interstellar distances.
- PI (π):** 3.14159265+. The ratio of the circumference of a circle to its diameter. For practical purpose, the value is used to four decimal places: 3.1416.
- PICA:** ⅙ inch or 12 points. Used in printing for measuring column width, etc.
- PIPE:** 2 hogsheads. Used for measuring wine and other liquids.
- POINT:** .013837 (approximately 1/72) inch or 1/12 pica. Used in printing for measuring type size.
- QUINTAL:** 100,000 grams or 220.46 pounds avoirdupois.
- QUIRE:** Used for measuring paper. Sometimes 24 sheets but more often 25. There are 20 quires in a ream.
- REAM:** Used for measuring paper. Sometimes 480 sheets, but more often 500 sheets.
- SCORE:** 20 units.
- SPAN:** 9 inches or 22.86 cm. Derived from the distance between the end of the thumb and the end of the little finger when both are outstretched.
- STONE:** Legally 14 pounds avoirdupois in Great Britain.
- TOWNSHIP:** U. S. land measurement of almost 36 square miles. The south border is 6 miles long. The east and west borders, also 6 miles long, follow the meridians, making the north border slightly less than six miles long. Used in surveying.
- TUN:** 252 gallons, but often larger. Used for measuring wine and other liquids.

DECIMAL EQUIVALENTS OF COMMON FRACTIONS

$\frac{1}{2}$	.5000	$\frac{1}{8}$	.1250	$\frac{3}{4}$	.7500	$\frac{6}{11}$	.5455
$\frac{1}{3}$	.3333	$\frac{1}{6}$	.1667	$\frac{4}{5}$	.8000	$\frac{7}{8}$	.8750
$\frac{1}{4}$	.2500	$\frac{2}{3}$	.6667	$\frac{4}{7}$	.5714	$\frac{7}{9}$	.7778
$\frac{1}{5}$	.2000	$\frac{2}{5}$	.4000	$\frac{4}{9}$	.4444	$\frac{7}{10}$	.7000
$\frac{1}{6}$	.1667	$\frac{2}{7}$	.2857	$\frac{4}{11}$	.3636	$\frac{7}{11}$	.6364
$\frac{1}{7}$	.1429	$\frac{2}{9}$	.2222	$\frac{5}{6}$	.8333	$\frac{7}{12}$	.5833
$\frac{1}{8}$	.1250	$\frac{2}{11}$	.1818	$\frac{5}{7}$	.7143	$\frac{8}{9}$	.8889
$\frac{1}{9}$	.1111	$\frac{3}{4}$	.7500	$\frac{5}{8}$	.6250	$\frac{8}{11}$	.7273
$\frac{1}{10}$	.1000	$\frac{3}{5}$	.6000	$\frac{5}{9}$	.5556	$\frac{9}{10}$	.9000
$\frac{1}{11}$	.0909	$\frac{3}{7}$	.4286	$\frac{5}{11}$	.4545	$\frac{9}{11}$	.8182
$\frac{1}{12}$	.0833	$\frac{3}{8}$	.3750	$\frac{5}{12}$	.4167	$\frac{10}{11}$	.9091
$\frac{1}{16}$	.0625	$\frac{3}{10}$	.3000	$\frac{6}{7}$	.8571	$\frac{11}{12}$	.9167

Handy Conversion Factors

To change	To	Multi- ply by
acres	hectares	.4047
bushels (U. S.)	hectoliters	.3524
centimeters	inches	.3937
cubic feet	cubic meters	.0283
cubic meters	cubic feet	35.3145
cubic meters	cubic yards	1.3079
cubic yards	cubic meters	.7646
feet	meters	.3048
gallons (U. S.)	liters	3.7853
grains	grams	.0648
grams	grains	15.4324
grams	ounces avdp.	.0353
hectares	acres	2.4710
hectoliters	bushels (U. S.)	2.8378
inches	millimeters	25.4001
inches	centimeters	2.5400
kilograms	pounds ap or t	2.6792
kilograms	pounds avdp.	2.2046
kilometers	miles	.6214
liters	gallons (U. S.)	.2642
liters	pecks	.1135
liters	pints (dry)	1.8162
liters	pints (liquid)	2.1134
liters	quarts (dry)	.9081
liters	quarts (liquid)	1.0567
meters	feet	3.2808
meters	yards	1.0936
metric tons	tons (long)	.9842
metric tons	tons (short)	1.1023
miles	kilometers	1.6093
millimeters	inches	.0394
ounces avdp.	grams	28.3495
pecks	liters	8.8096
pints (dry)	liters	.5506
pints (liquid)	liters	.4732
pounds ap or t	kilograms	.3732
pounds avdp.	kilograms	.4536
quarts (dry)	liters	1.1012
quarts (liquid)	liters	.9463
square feet	square meters	.0929
square meters	square feet	10.7639
square meters	square yards	1.1960
square yards	square meters	.8361
tons (long)	metric tons	1.0160
tons (short)	metric tons	.9072
yards	meters	.9144

Perfect Squares and Cubes, 1 to 25

Number	Square root	Cube root	Number	Square root	Cube root
1	1	1	512	22	8
4	2	..	529	23	..
8	..	2	576	24	..
9	3	..	625	25	..
16	4	..	676	26	..
25	5	..	729	27	9
27	..	3	784	28	..
36	6	..	841	29	..
49	7	..	900	30	..
64	8	4	961	31	..
81	9	..	1000	..	10
100	10	..	1024	32	..
121	11	..	1089	33	..
125	..	5	1156	34	..
144	12	..	1225	35	..
169	13	..	1296	36	..
196	14	..	1331	..	11
216	..	6	1369	37	..
225	15	..	1444	38	..
256	16	..	1521	39	..
289	17	..	1600	40	..
324	18	..	1681	41	..
343	..	7	1728	..	12
361	19	..	1764	42	..
400	20	..	1849	43	..
441	21	..	1936	44	..
484	22	..	2025	45	..

Mean and Median

The mean, also called the average, of a series of quantities is obtained by finding the sum of the quantities and dividing it by the number of quantities. In the series 1,3,5,18,19,20,25, the mean or average is 13 —i.e., 91 divided by 7.

The median of a series is that point which so divides it that half the quantities are on one side, half on the other. In the above series, the median is 18.

The median often better expresses the common-run, since it is not, as is the mean, affected by an excessively high or low figure. In the series 1,3,4,7,55, the median of 4 is a truer expression of the common-run than is the mean of 14.

Calories and Vitamins of Selected Foods

Source: U. S. Dept. of Agriculture, Agriculture Handbook No. 8 (June, 1950).

Food and (amount) ¹	Energy, calories	Vitamin A, Int. Units	Thiamine, mg.	Riboflavin, mg.	Niacin, mg.	Ascorbic acid, mg.
Apples (1 medium R).....	76	120	.05	.04	.2	6
Bacon: medium fat (2 sl. C).....	97	(0)	.08	.05	.8	0
Bananas (1 medium R).....	88	430	.04	.05	.7	10
Beans: snap, green (1 cup C) ²	27	830	.09	.12	.6	18
Beef: sirloin ³ (3 oz. C).....	257	(0)	.06	.16	4.1	0
Beets: red, diced (1 cup C).....	68	30	.03	.07	.5	11
Bread: rye (1 sl.).....	57	0	.04	.02	.4	(0)
Bread: white, enriched ⁴ (1 sl.).....	63	0	.06	.04	.5	(0)
Bread: wholewheat (1 sl.).....	55	0	.07	.03	.7	(0)
Butter (1 tbs.).....	100	460 ⁵	trace	trace	trace	(0)
Buttermilk: cultured ⁶ (1 cup).....	86	10	.09	.43	.3	3
Cabbage (1 cup R).....	24	80	.06	.05	.3	50
Carrots: diced (1 cup C).....	44	18,130	.07	.07	.7	6
Cheese: Swiss (1 oz.).....	105	410	trace	(.11)	trace	(0)
Cheese: cottage ⁶ (1 cup).....	215	(50)	.04	.69	(.2)	(0)
Chicken: roasters ⁷ (4 oz.).....	227	(0)	.09	.18	9.1	(0)
Chocolate: unsweetened (1 oz.).....	142	20	.01	.06	.3	(0)
Corn (1 ear C).....	84	390 ⁸	.11	.10	1.4	8
Crackers: graham (2 medium).....	55	(0)	.04	.02	.2	(0)
Cream: light (½ pt.).....	489	1,980	.07	.34	.2	3
Eggs: poached (1).....	77	540	.04	.12	trace	0
Flour: wheat, enriched ⁹ (1 cup).....	401	(0)	.48	.29	3.8	(0)
Grapefruit (½ medium).....	75	20	.07	.04	.4	76
Ham: smoked ³ (3 oz. C).....	339	(0)	.46	.18	3.5	0
Hamburger (3 oz. C).....	316	(0)	.07	.16	4.1	0
Honey (1 tbs.).....	62	(0)	trace	.01	trace	1
Ice cream (1/7 qt.).....	167	420	.03	.15	.1	1
Lamb: leg roast ³ (3 oz. C).....	230	(0)	.12	.21	4.4	0
Lemons (1 medium).....	20	0	.03	trace	.1	31
Liver: calf (3 oz. R).....	120	19,130	.18	2.65	13.7	30
Macaroni: enriched (1 cup C).....	209	(0)	.24	.15	2.0	(0)
Margarine ¹⁰ (1 tbs.).....	101	460	(.00)	(.00)	(.0)	(0)
Milk: fluid, whole (1 cup).....	166	(390)	.09	.42	.3	3
Molasses: cane, medium (1 tbs.).....	46	...	...	...	...	...
Oatmeal (1 cup C).....	148	(0)	.22	.05	.4	(0)
Oranges (1 medium).....	70	(290)	.12	.04	.4	77
Oysters ¹¹ (1 cup R).....	200	770	.35	.48	2.8	...
Peaches (1 medium R).....	46	880	.02	.05	.9	8
Peanut butter (1 tbs.).....	92	0	.02	.02	2.6	(0)
Peanuts: roasted, chopped (1 tbs.).....	50	0	.03	.01	1.5	(0)
Peas: green, immature (1 cup C).....	111	1,150	.40	.22	3.7	24
Plums (1 R).....	29	200	.04	.02	.3	3
Pork: loin ³ (3 oz. C).....	284	(0)	.71	.20	4.3	0
Potatoes: sweet (1 baked).....	183	11,410 ¹²	.12	.08	.9	28
Potatoes: white (1 cup mashed) ¹³	159	80	.16	.10	1.7	14
Prunes: unsulfured (1 cup C).....	310	2,210	.07	.20	2.0	2
Raisins: unsulfured (1 tbs.).....	26	trace	.02	.01	trace	trace
Rice: white (1 cup C).....	201	(0)	.02	.01	.7	(0)
Round steak ³ (3 oz. C).....	197	(0)	.06	.19	4.7	0
Salmon: pink, canned (3 oz.).....	122	60	.03	.16	6.8	(0)
Sausage: pork, canned (4 oz.).....	340	(0)	.23	.27	3.4	0
Spaghetti: enriched (1 cup C).....	218	(0)	.25	.15	2.1	(0)
Spinach (1 cup C).....	46	21,200	.14	.36	1.1	54
Sugar: granulated (1 tsp.).....	16	(0)	(.00)	(.00)	(.0)	(0)
Tomatoes (1 medium R).....	30	1,640	.08	.06	.8	35
Turkey: medium fat (4 oz. R).....	304	trace	.10	.16	9.1	(0)
Turnips: diced (1 cup C).....	42	trace	.06	.09	.6	28
Veal cutlet ³ (3 oz. C).....	184	(0)	.07	.24	5.2	0

¹ R—raw; C—cooked. ² Cooked short time in small amount of water. ³ Boneless. ⁴ 4% nonfat milk solids. Year-round average. ⁵ Made from skim milk. ⁶ Bone out. Vitamin values based on muscle meat only. ⁷ Based on yellow corn; white corn contains only a trace. ⁸ Patent. ⁹ Vitamin A added. ¹⁰ Vitamin A added. ¹¹ Meat only. ¹² If very pale varieties only were used, value would be much lower. ¹³ Milk added.

NOTE: Parentheses denote imputed values. The sign ... shows that no basis could be found for imputing a value although there was some reason to believe that a measurable amount might be present.

Chemical Elements

Source: Professor Philip S. Chen, Atlantic Union College.

Atomic number	Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date discovered
1	Hydrogen	H	1.0080	0.07†	-259.14	-252.7	1	3	Cavendish	1766
2	Helium	He	4.003	0.15†	<-272.2	-268.9	0	2	Ramsay	1895
3	Lithium	Li	6.940	0.534	186.	>1200.	1	2	Arfvedson	1817
4	Beryllium*** (Glucinum)	Be	9.013	1.84	1350.	1500.	2	1	Vauquelin	1798
5	Boron	B	10.82	2.535§	2300.	2500.	3	2	Gay-Lussac and Thenard; Davy	1808
6	Carbon	C	12.010	2.25**	>3500.	4200.	2, 3 or 4	2	Prehistoric	....
7	Nitrogen	N	14.008	0.810†	-209.86	-195.3	3 or 5	2	Rutherford	1772
8	Oxygen	O	16.0000	1.14†	-218.4	-183.00	2	3	Priestley	1774
9	Fluorine	F	19.00	1.14†	-223.	-187.	1	1	Moissan	1886
10	Neon	Ne	20.183	0.90035 (g/10°C. 760mm)	-248.67	-245.9	0	3	Ramsay and Travers	1898
11	Sodium	Na	22.997	0.9287†	97.5	880.	1	1	Davy	1807
12	Magnesium	Mg	24.32	1.741	651.	1110.	2	3	Davy	1808
13	Aluminum	Al	26.97	2.699†	660.0	1800.	3	1	Wöhler	1827
14	Silicon	Si	28.06	2.42**	1420.	2600.	4	3	Berzelius	1824
15	Phosphorus	P	30.98	1.83 (white)	44.1	280.	3 or 5	1	Brand	1669
16	Sulfur	S	32.066	2.0-1	112.8	444.6	2, 4 or 6	4	Prehistoric	....
17	Chlorine	Cl	35.457	1.507†	-101.6	-34.6	1, 3, 5 or 7	2	Scheele	1774
18	Argon	A	39.944	1.423†	-189.2	-185.7	0	3	Rayleigh and Ramsay	1894
19	Potassium	K	39.096	0.87	62.3	760.	1	3	Davy	1807
20	Calcium	Ca	40.08	1.54	810.	1170.	2	6	Davy	1808
21	Scandium	Sc	45.10	3.62 (10°C.)	1200.	2400.	3	1	Nilson	1879
22	Titanium	Ti	47.90	4.5	1800.	>3000.	3 or 4	5	Gefors	1791
23	Vanadium	V	50.95	5.69	1710.	3000.	2, 3, 4 or 5	1	Seefstrom	1830
24	Chromium	Cr	52.01	6.92	1615.	2200.	2, 3 or 6	4	Vauquelin	1798
25	Manganese	Mn	54.93	7.42	1260.	1900.	2, 3, 4, 6 or 7	1	Gahn	1774
26	Iron	Fe	55.85	7.85-88	1535.	3000.	2, 3 or 6	4	Prehistoric	....
27	Cobalt	Co	58.94	8.9	1480.	2900.	2 or 3	1	Brandt	1735
28	Nickel	Ni	58.69	8.60-90	1452.	2900.	2 or 3	5	Cronstedt	1751
29	Copper	Cu	63.54	8.30-95	1083.	2300.	1 or 2	2	Prehistoric	....
30	Zinc	Zn	65.38	7.04-16	419.43	907.	2	5	Marggraf	1746
31	Gallium	Ga	69.72	5.903	29.75	>1600.	2 or 3	2	Boisbaudran	1875
32	Germanium	Ge	72.60	5.46	958.5	2700.	4	5	Winkler	1866
33	Arsenic	As	74.91	5.73	814.	615.	3 or 5	1	Albertus Magnus	1250§§
34	Selenium	Se	78.96	4.3-8	220.	688.	2, 4 or 6	6	Berzelius	1818
35	Bromine	Br	79.916	3.12†	-7.2	58.78	1, 3, 5 or 7	2	Balard	1826
36	Krypton	Kr	83.7	2.16†	-169.	-151.8	0	6	Ramsay and Travers	1898
37	Rubidium	Rb	85.48	1.532	38.5	700.	1	2	Bunsen and Kirchhoff	1861
38	Strontium	Sr	87.63	2.50-58	800.	1150.	2	4	Davy	1808
39	Yttrium	Y	88.92	3.80	1490.	250.	3	1	Gadolin	1794
40	Zirconium	Zr	91.22	6.44	1700.	>2900.	4	5	Kloproth	1789
41	Niobium*** (Columbium)	Nb	92.91	8.4	1950.	>3300.	3 or 5	1	Hatchett	1801
42	Molybdenum	Mo	95.95	9.01	2620±10	3700.	2, 3, 4, 5 or 6	7	Hjelm	1781
43	Technetium	Tc	98.	.....	2300.	.....	2, 3, 4 or 6	8††	Perrier and Segre	1937
44	Ruthenium	Ru	101.7	12.06	2450.	>2700.	3, 4, 6 or 8	7	Klaus	1844
45	Rhodium	Rh	102.91	12.44	1955.	>2500.	3	1	Wollaston	1803
46	Palladium	Pd	106.7	12.16 (20°C.)	1555.	2200.	2 or 4	6	Wollaston	1803
47	Silver	Ag	107.880	10.503††	960.5	1950.	1	2	Prehistoric	....
48	Cadmium	Cd	112.41	8.648	320.9	767.	2	8	Stromeyer	1817
49	Indium	In	114.76	7.28	155.	1450.	1 or 3	2	Reich and Richter	1863
50	Tin	Sn	118.70	7.29	231.83	2260.	2 or 4	10	Prehistoric	....
51	Antimony	Sb	121.76	6.618	630.5	1380.	3 or 5	2	Prehistoric	....
52	Tellurium	Te	127.61	6.25**	452.	1390.	2, 4, or 6	8	Von Richenstein	1782
53	Iodine	I	126.92	4.94	113.5	184.35	1, 3, 5 or 7	1	Courtois	1811

Atomic number	Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date discovered
54	Xenon	Xe	131.3	3.52‡	-140.	-109.1	0	9	Ramsay and Travers	1898
55	Cesium	Cs	132.91	1.873	26.	670.	1	1	Bunsen and Kirchhoff	1860
56	Barium	Ba	137.36	3.78	850.	1140.	2	7	Davy	1808
57	Lanthanum	La	138.92	6.5	826.	1800.	3	2	Mosander	1839
58	Cerium	Ce	140.13	6.9	770.	1400.	3 or 4	4	Klaproth; Berzelius and Hisinger	1803
59	Praseodymium	Pr	140.92	6.475	940.	.....	3, 4 or 5	1	Auer von Welsbach	1885
60	Neodymium	Nd	144.27	6.96	840.	.....	3	7	Auer von Welsbach	1885
61	Promethium	Pm	147.	.....	.....	.....	3	3††	Marinsky and Glendenin	1945
62	Samarium	Sm	150.43	7.7-8	1350.	.....	2 or 3	7	Boisbaudran	1879
63	Europium	Eu	152.0	.....	1100.	.....	2 or 3	2	Demarcay	1901
64	Gadolinium	Gd	156.9	.....	.....	.....	3	7	Marignac	1880
65	Terbium	Tb	159.2	.....	.....	.....	3 or 4	1	Mosander	1843
66	Dysprosium	Dy	162.46	.....	.....	.....	3	7	Boisbaudran	1886
67	Holmium	Ho	164.94	.....	.....	.....	3	1	Soret	1878
68	Erbium	Er	167.2	7.77 (†)	1250(†)	.....	3	6	Mosander	1843
69	Thulium	Tm	169.4	.....	.....	.....	3	1	Cleve	1879
70	Ytterbium	Yb	173.04	.....	1800.	.....	3	7	Marignac	1878
71	Lutetium	Lu	174.99	.....	.....	.....	3 or 4	2	Urbain	1907
72	Hafnium	Hf	178.6	13.3	1700.	3200.	4	6	Coster and von Hevesy	1923
73	Tantalum	Ta	180.88	16.6	2850.	4100.	3 or 5	1	Ekeberg	1802
74	Wolfram*** (Tungsten)	W	183.92	18.6-19.1	3370.	5900.	2, 4, 5 or 6	5	d'Elhuyar	1783
75	Rhenium	Re	186.31	20.53 (20°C.)	3000.	.....	4	2	Noddack and Berg	1925
76	Osmium	Os	190.2	22.5	2700.	5300.	2, 3, 4 or 8	7	Tennant	1804
77	Iridium	Ir	193.1	22.42	2350.	4800.	3 or 4	2	Tennant	1804
78	Platinum	Pt	195.23	21.37	1755.	4300.	2 or 4	5	De Ulloa	1748
79	Gold	Au	197.2	19.3††	1063.0	2600.	1 or 3	1	Prehistoric	.....
80	Mercury	Hg	200.61	13.596‡	-38.87	356.90	1 or 2	7	Prehistoric	.....
81	Thallium	Tl	104.39	11.86	303.5	1650.	1 or 3	2	Crookes	1861
82	Lead	Pb	207.21	11.347††	327.5	1620.	2 or 4	4	Prehistoric	.....
83	Bismuth	Bi	209.00	9.80	271.	1450.	3 or 5	4	Geoffroy	1753
84	Polonium	Po	210.0	.....	.....	.....	..	7	Curie	1898
85	Astatine	At	211.	.....	470.	.....	1, 3, 5 or 7	2	Corson et al	1940
86	Radon	Rn	222.	9.739‡	-71.	-61.8	0	3	Dorn	1900
87	Francium	Fa	223.	.....	23.	.....	1	1	Perey	1939
88	Radium	Ra	226.05	(5)	960.	1140.	2	4	Curie	1898
89	Actinium	Ac	227	.....	.....	.....	..	2	Debierne	1899
90	Thorium	Th	232.12	11.13	1845.	3000.	4	6	Berzelius	1828
91	Protactinium	Pa	231.	.....	.....	.....	..	2	Hahn and Meitner	1917
92	Uranium	U	238.07	18.7	1850.	.....	3, 4 or 6	3	Klaproth	1789
93	Neptunium	Np	239.	.....	.....	.....	3, 4, 5 or 6	5††	McMillan and Abelson	1940
94	Plutonium	Pu	238.	.....	.....	.....	3, 4, 5 or 6	6††	Seaborg et al	1940
95	Americium	Am	241.	.....	.....	.....	3	3††	Seaborg et al	1944
96	Curium	Cm	242.	.....	.....	.....	3	2††	Seaborg et al	1944
97	Berkelium	Bk	243	.....	.....	.....	3 or 4	1	Seaborg et al	1950
98	Californium	Cf	...	.....	.....	.....	3	1	Seaborg et al	1950

* VALENCE is a measure of the extent to which an atom is able to combine directly with others.

† ISOTOPES are one of two or more elements having same atomic number identical in chemical behavior. Because of their differences in mass, isotopes may be distinguished in the mass spectrophotograph and in band spectra. Now becoming increasingly important in chemical observations and discoveries of new elements and properties.

‡ Liquid. § Amorphous. ¶ Graphite. ** Crystalline. †† Compressed. ‡‡ Cast. §§ Exact date doubtful—born 1193 and died 1280. ¶¶ Have been artificially produced. *** New name adopted by International Union of Chemistry, replacing old name in parentheses. < Is less than. > Is greater than.

Figures in parentheses are tentative or theoretical.

Note that the number of isotopes of each element is increasing by discovery or by manufacture.

SCIENTIFIC INVENTIONS AND DISCOVERIES

Source: Encyclopaedia Britannica.

DISCOVERIES AND INVENTIONS IN CHEMISTRY

- 1766—CAVENDISH. Discovery of "inflammable air" (hydrogen) as distinct substance and demonstration (1781) that it burned to form water.
- 1774—PRIESTLEY. Discovery of oxygen.
- 1783—LAVOISIER. First quantitative synthesis of water.
- 1803—DALTON. Atomic theory; laws of chemical combination.
- 1809—GAY-LUSSAC. Laws of gases.
- 1811—AVOGADRO. Molecular hypothesis.
- 1828—WÖHLER, LIEBIG. Synthesis of urea; foundation of organic chemistry.
- 1841—FARADAY. Induction of electric current.
- 1860—BUNSEN, KIRCHHOFF. Invention of the spectroscope.
- 1868—LOCKYER. Discovery of helium on the sun by use of spectroscope.
- 1869—MENDELEEV. Periodic table of elements, established families of elements.
- 1887—ARRHENIUS. Ionic theory of dissociation in solution.
- 1896—BECQUEREL. Radioactivity of uranium.
- 1899—CURIE. Discovery of radium.
- 1908—KAMERLINGH ONNES. Liquefaction of helium.
- 1912—LAUE, BRAGG. X-ray structures of crystals.
- 1913—MOSELEY. Atomic numbers.
- 1919—ASTON. Mass spectroscope for separation of isotopes.
- 1932—UREY. Discovery of deuterium.
- 1934—JOLIOU, CURIE. Artificial radioactivity.

INVENTIONS AND DISCOVERIES IN APPLIED CHEMISTRY

- 1650—GLAUBER. Manufacture of hydrochloric acid.
- 1839—GOODYEAR. Process for vulcanizing rubber.
- 1846—SCHÖNBEIN. Invention of gun cotton.
- 1856—BESSEMER. Air blast converter for manufacture of steel.
- 1858—HOFMANN. Discovered aniline in coal tar; aniline dyes.
- 1861—SOLVAY. Manufacture of soda from salt.
- 1862—NOBEL. Invention of dynamite.
- 1873—LINDE. Introduced ammonia refrigeration.
- 1886—HALL. Manufacture of aluminum by electrolytic action.
- 1891—FRASCH. Method for mining sulphur.
- 1908—BAEKELAND. Phenol-formaldehyde resins (Bakelite).
- 1913—HABER. Synthesis of ammonia from nitrogen and hydrogen.
- 1915—LANGMUIR. Tungsten filaments.
- 1923—MIDGLEY. Tetraethyl lead gasoline.
- 1930—CAROTHERS. Nylon plastic.
- 1930—IPATIEFF. High-octane gasoline.
- 1930—CAROTHERS and COLLINS. Neoprene, synthetic rubber.

DISCOVERIES AND INVENTIONS IN ELECTRICITY

- 1745—VON KLEIST. Leyden jar condenser.
- 1752—FRANKLIN. Lightning rod and the nature of lightning.
- 1791—GALVANI. Theory of animal electricity.
- 1800—VOLTA. Current electricity and electric battery.
- 1826—OHM. Laws of electrical resistance.
- 1828—HENRY. Electromagnetism and induction.
- 1831—FARADAY. Electromagnetic induction.
- 1832—MORSE. Electric telegraph perfected.
- 1832—GAUSS. System of absolute electric measurements.
- 1838—PAGE. Induction coil.
- 1870—GRAMME. First industrial dynamo.
- 1876—BELL. Telephone.
- 1878—CROOKES. Discovery of cathode ray.
- 1878—EDISON. First electric incandescent lamp.
- 1885—STANLEY. Electric transformer.
- 1892—TESLA. Alternating current motor.
- 1892—STEINMETZ. Laws of alternating current.
- 1895—ROENTGEN. Discovery of X-rays.
- 1896—MARCONI. Practical wireless.
- 1897—THOMSON. Isolation of the electron.
- 1904—FLEMING. First diode radio tube.
- 1907—DE FOREST. Triode radio tube.
- 1914—COOLIDGE. Tungsten filament lamp.
- 1925—BAIRD. Televisor, precursor of television.

MECHANICAL INVENTIONS AND DISCOVERIES

- c.1440—GUTENBERG (?). Movable-type printing. (Gutenberg Bible published in 1456.)
- 1769—WATT. Steam engine patented.
- 1783—MONTGOLFIER. Hot-air balloon.
- 1785—CARTWRIGHT. Power loom.
- 1787—FITCH. Steamboat.
- 1793—WHITNEY. Cotton gin; mass production of interchangeable gun parts, 1798.
- 1807—FULTON. First successful steamboat.
- 1816—DAVY. Miner's safety lamp.
- 1829—STEPHENSON. First successful steam railroad.
- 1833—McCORMICK. Reaper.
- 1835—COLT. Revolver.
- 1837—ERICSSON. Screw propeller.
- 1846—HOE. Rotary printing press.
- 1846—HOWE. Sewing machine.
- 1852—OTIS. Improved power elevator.
- 1858—FIELD. Successful Atlantic cable.
- 1861—GATLING. Machine gun.
- 1868—SHOLES, GLIDDEN. Typewriter.
- 1869—WESTINGHOUSE. Air brake for railroads.
- 1877—EDISON. Phonograph.
- 1888—DUNLOP. Pneumatic tire.
- 1893—EDISON. Motion pictures.
- 1897—DIESEL. First successful heavy oil engine.
- 1903—WRIGHT BROTHERS. Airplane.
- 1905—SPERRY. Gyrocompass.
- 1909—BRÉGUET. Helicopter.

DISCOVERIES AND INVENTIONS IN PHYSICS

- 1687—NEWTON. Law of gravity.
- 1785—COULOMB. Fundamental laws of electrical attraction.
- 1798—THOMPSON (Baron Rumford). Mechanical theory of heat.
- 1815—FRESNEL. Diffraction of light.
- 1840—JOULE. Measurements of electric current.
- 1847—HELMHOLTZ. Law of conservation of energy.
- 1873—MAXWELL. Electromagnetic theory of light.
- 1896—BECQUEREL. Discovery of radioactivity.
- 1897—WILSON. Development of cloud chamber to detect subatomic particles.
- 1897—THOMSON. Discovery of electrons.
- 1901—PLANCK. Quantum theory.
- 1902—MICHELSON. Velocity of light.
- 1905—EINSTEIN. Special theory of relativity.
- 1911—RUTHERFORD. Theory of atomic nucleus.
- 1913—BOHR. Electron theory.
- 1924—DE BROGLIE. Wave nature of the electrons.
- 1931—LAWRENCE. Invention of the cyclotron.
- 1932—CHADWICK. Discovery of the neutron.
- 1932—ANDERSON. Discovery of the positron.
- 1934—FERMI. Use of slow neutrons in atom smashing.
- 1938—HAHN. Discovery of uranium fission.
- 1941—FERMI, *et al.* Atomic pile for generation of power.

DISCOVERIES IN PHYSIOLOGY AND MEDICINE

- 1628—HARVEY. Circulation of blood and function of the heart.
- 1675—LEEUEWENHOEK. Observation of bacteria by microscope.
- 1737—LINNAEUS. System for classifying plants and animals.
- 1796—JENNER. Vaccination for smallpox.
- 1842—LONG. First to use ether as anesthetic in surgery. (Jackson, Morton, and Long disputed first use of ether.)
- 1859—DARWIN. Evolution and theory of natural selection.
- 1865—MENDEL. Laws of heredity.
- 1867—LISTER. Antiseptic surgery.
- 1882—PASTEUR. Rabies preventive.
- 1882—KOCH. Tuberculosis bacteria discovered.
- 1894—ROUX. Perfection of diphtheria antitoxin.
- 1901—TAKAMINE. Isolation of adrenaline, first hormone isolated.
- 1905—BINET. Intelligence tests.
- 1906—WASSERMANN, *et al.* Test for syphilis.
- 1908—FREUD. Doctrine of psychoanalysis.
- 1910—PAVLOV. Mechanism of the conditioned reflex.
- 1913—SCHICK. Test of susceptibility to diphtheria.
- 1913—McCOLLUM. Isolation of vitamin A.
- 1922—BANTIN, MACLEOD. Insulin for treatment of diabetes.
- 1932—DOMAGK. Sulfa drugs as bactericides.
- 1946—DU VIGNEAUD. Synthetic penicillin.

The Races of Mankind

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Classification of Man into groups called "races" rests upon the basic fact that all peoples belong to the same genus and species, *Homo sapiens*. This is important to keep in mind, for it implies that all peoples are much more alike than different.

Scientists classify Man by using a number of physical traits, most of them based upon observation rather than upon precise measurement. Examples of these are stature and head-form (determined by a breadth/length ratio), skin color, hair color, form and texture, eye color, nose shape, mouth form, shape of face with special reference to cheekbones. Other criteria, such as arm and leg proportions, are more specialized. Two things are noteworthy here: (1) most of the physical traits are external; (2) physical traits are so variable that a single trait has virtually no diagnostic value.

We may define a *race*, simply, as a subgroup of Mankind more or less set apart by a combination of physical traits.

There are three, possibly four, great aggregates of races, usually called *stocks*: *Caucasoid*, *Mongoloid*, *Negroid*, and *Archaic Caucasoid* (or *Australoid*). The first three are often referred to as "White," "Yellow," and "Black." This is not really correct; peoples of North-Central India are *Caucasoids*, yet their skin color is brown to dark brown; certain tribes of Northeast Africa are *Negroids*, yet their skin color is light brown to brown. Variability also may be seen in stature: the tallest people in the world are found in Denmark and the Scottish Highlands, in East Africa, and in southernmost South America—respectively *Caucasoid*, *Negroid*, and *Mongoloid*. It must be re-emphasized that not one or two traits, but an aggregate of traits, of genetic origin, provides the only valid method of setting up stock or racial classification.

Caucasoids are the peoples of Europe, the adjacent shores of North Africa, and of Asia Minor and the northern half of India. The following races belong to the *Caucasoid* stock: *Nordic*, or Northwest European, *Alpine* or Central European, *Mediterranean* or Southwest European, *Baltic* or Northeast European, *Dinaric* or Southeast European, *Armenoid* in western Asia Minor, and *Indio* (often called *Hindu*) in North-Central India. These races are not, of course, absolutely limited to those geographical areas. For example, the Mediterranean race is found also in North Africa, especially Egypt, and in Asia Minor, where it is represented by the *Bedouin* Arabs of Arabia. Other *Caucasoid* peoples are the *Magyars*, the *Finn*s, and the *Lapps*, who show traces of *Mongoloid* mixtures, especially the last.

The *Negroids* are the peoples of Africa and Oceania, termed respectively the *African Negroids* and the *Oceanic Negroids*. The following African *Negroid* races are commonly recognized: *Forest* or *West African* or "True" *Negro* in West Africa, *Sudan*ic in Central Africa, *Nilotic* in East Africa, *Hamitic* in Northeast and North Africa, *Bantu* (better: *Bantu-speaking*) in South Africa, and *Bushman-Hottentot* in the *Kalahari Desert* of South Africa. The *Oceanic Negroids* are commonly called *Melanesian* or *Papuan*, and are found chiefly in *Borneo*, *New Caledonia*, the *Solomons*, the *Hebrides* and *Fiji*.

Of special interest among *Negroids* are *Pygmies*, who average about four feet in stature. They are found in Africa in the *Congo* region, in the *Ituri Forest*, and in Oceania on the *Andaman Islands*, the *Malay Peninsula*, the *Philippines*, and *Borneo*.

The *Mongoloids* are basically the peoples of Asia, but are also in the Western Hemisphere as the *American Indians*, and are represented in *Malaysia* and in *Oceania*. The *Mongoloids* are usually divided into the following races: *Sinic* of China and Japan, *Paleartic* of Siberia, *Turkic* and *Tungic* or *Mongolic* of Central Asia, and *Malayan* of *Malaysia*. In the Western Hemisphere they are found as *Eskimos* and the *Indians* of the *Americas*. In *Polynesia*, i.e., in *Samoa*, *Tonga*, *Hawaii* and west to *Easter Island*, the *Mongoloid* stock is a basic element, with some *Caucasoid* and some *Negroid* (*Melanesian*?) admixture.

The *Archaic Caucasoids* are found in *Australia* as the *Australian aborigines* and in Japan as the *Ainu*. They may possibly be an element in *Melanesia* and in *Ceylon* and *South India*, e.g., the *Toda*, the *Vedda*, and other tribes.

This is a brief survey of the "stocks" and "races" of the world. There is much intermixing and some overlapping. This leads to two very important biological observations: (1) *there are no pure races*; (2) *there are no superior or inferior races*. We know from history that all peoples, upon contact, have crossed their genetically based physical traits. We know from human anatomy that in fundamental structure all peoples are identical.

As far as biological Man is concerned, what he is, is related to his cultural environment, rather than to any innate (or inherited) ability or aptitude. There is no "German race," only a German nationality; there is no "Jewish race," only a Jewish socio-religious community; there is no "Aryan race," only an Aryan language; there is no "master race," only a political bombast!

RELIGION



Principal Religions of the World

Source: *Encyclopaedia Britannica*.

Statistics of the world's religions are only very rough approximations. Aside from Christianity, few religions, if any, attempt to keep statistical records; and even Protestants and Catholics employ different methods of counting members. All persons of whatever age who have received baptism in the Catholic Church are counted as members, while in most Protestant Churches only those who "join" the church are numbered. The compiling of statistics is further complicated by the fact that in China one may be at the same time a Confucian, a Taoist and a Buddhist. In Japan, one may be both a Buddhist and a Shintoist.

Religion	North America	South America	Europe	Asia ¹	Africa	Oceania ²	Total
Christian—Total.....	128,467,527	91,677,138	441,383,109	25,374,305	28,911,430	26,171,973	741,985,482
Roman Catholic.....	74,561,995	89,412,040	215,363,295	8,857,842	14,194,448	18,951,281	421,340,901
Eastern Orthodox.....	1,208,157	.....	112,447,669	8,106,071	5,868,088	.....	127,629,986
Protestant.....	52,697,375	2,265,098	113,572,145	8,410,392	8,848,893	7,220,692	193,014,595
Jewish ³	5,185,000	597,850	3,505,800 ⁴	1,247,200	723,500	44,000	11,303,350
Mohammedan.....	32,600	139,156	3,866,000	251,227,347	60,359,000	75,000	315,699,103
Zoroastrian.....	.....	.....	.....	124,890	.....	.....	124,890
Shinto.....	.....	.....	.....	25,000,000	.....	.....	25,000,000
Taoist.....	15,000	17,000	12,000	50,000,000	1,200	8,000	50,053,200
Confucian.....	85,000	95,000	50,000	300,000,000	7,500	52,000	300,289,500
Buddhist.....	165,000	135,000	.....	150,000,000	.....	.....	150,300,000
Hindu.....	10,000	275,000	.....	255,030,506	300,000	100,000	255,715,506
Primitive.....	50,000	1,000,000	.....	45,000,000	75,000,000	100,000	121,150,000
Others or none.....	76,540,873	9,803,856	82,491,091	160,559,752	12,639,370	5,363,027	347,397,969
Grand Total.....	210,551,000	103,740,000	531,308,000	1,263,564,000	177,942,000	31,914,000	2,319,019,000

¹ Includes Indonesia, but not Philippines. ² Includes Philippines. ³ Includes all Jews, whether or not members of a synagogue. ⁴ Includes Asiatic U.S.S.R. and Turkey.

History of Leading Religious Groups in the United States

Source: *Yearbook of American Churches and Christian Herald*.

(Religious bodies listed have memberships of 50,000 or over—53 Protestant bodies and 10 non-Protestant bodies. Memberships shown are for 1949, as published in the July, 1950, issue of *Christian Herald*, New York.)

Baptist

American Baptist Association.—A group of independent Missionary Baptist churches in the Southwest, organized into an association in 1905. They adhere strictly to the apostolic order of church polity and co-operation. Members: 313,817.

American Baptist Convention.—The early historical local independency of Baptist churches in America tended to impede the formation of any general organization until in 1814 a General Missionary Convention was formed to permit Baptists to express themselves in terms of missionary activities. In 1845, the state conventions in the South withdrew to organize the Southern Baptist Convention. In 1907, the Northern Baptist Convention was organized, a delegated body under whose direction the many agencies of the Baptists in the North and West now operate. In May, 1950, the name was changed to the American Baptist Convention. Members: 1,583,360.

Free Will Baptists.—This is a body of Arminian Baptists centering in North Caro-

lina, where the first church of this group was organized in 1727. Members: 255,127.

General Association of Regular Baptist Churches.—A fellowship of those seeking to maintain fundamental Baptist doctrine; ordinances of baptism and Lord's Supper observed. Members: 85,000.

National Baptist Convention, U. S. A., Inc.—The older and parent convention of Negro Baptists. This body is to be distinguished from the National Baptist Convention of America, usually referred to as the "unincorporated" body. The "incorporated" convention is a constituent member of the Federal Council of the Churches of Christ in America. Members: 4,385,206.

National Baptist Convention of America.—This is a body usually referred to as the "unincorporated" convention, not to be confused with the "incorporated" National Baptist Convention, U. S. A., Inc., from which this body withdrew. Organized in 1895. Members: 2,594,521.

National Baptist Evangelical Life and Soul Saving Assembly of U. S. A.—Organized in 1921 by A. A. Banks, Sr., as a charitable, educational, and evangelical organization. Members: 56,934.

Primitive Baptists.—A large group of Baptists, largely through the South, who

are opposed to all centralization, to modern missionary societies, and to Sunday schools. They are sometimes called "anti-missionary" Baptists. Members: 69,157.

Southern Baptist Convention.—In 1845, Southern Baptists withdrew from the General Missionary Convention over the question of slavery and other matters and formed the Southern Baptist Convention. Members: 6,761,265.

The United American Free Will Baptist Church.—A body which set up its organization in 1901. Though ecclesiastically distinct, they are in close relations with the Free Will Baptists. Members: 75,000.

Catholic and Orthodox

Armenian Apostolic Church.—The American branch of the Ancient Church of Armenia. Established in U. S. in 1889. Diocesan organization under the jurisdiction of the Holy See of Etchmiadzin, Armenia, U.S.S.R. Members: 110,000.

Greek Orthodox Church (Hellenic).—Greek-speaking Orthodox Christians have had scattered parishes in the U. S. for the last seventy years. These were first under the jurisdiction of the Metropolitan of Athens and later under the Patriarchate of Constantinople. Political changes in Europe have been reflected in this country and have brought difficulties in all branches of the Orthodox Church. In 1931, a general convention held in New York City under the presidency of Archbishop Athenagoras brought a large measure of unity and order. Members: 300,000.

North American Old Roman Catholic Church.—Identical with the Roman Catholic Church in worship, faith, etc., but differs in discipline. It was received into union with the Eastern Orthodox Church by the Archbishop of Beirut in 1911 and by the Orthodox Patriarch of Alexandria in 1912. Members: 78,000.

Polish National Catholic Church.—After a long period of dissatisfaction with Roman Catholic Administration in many Polish parishes, this group was organized in 1904. Members: 250,000.

The Roman Catholic Church.—The largest single group of Christians in the U. S., the Roman Catholic Church is under the spiritual leadership of Pope Pius XII. This group dates back to the priests who accompanied Columbus on his second voyage to the New World. A settlement, later discontinued, was made at St. Augustine, Fla. The continuous history of this Church in the colonies began at St. Mary's in 1634, in Maryland. Members: 26,718,343.

Russian Orthodox Church.—The Russian Orthodox Church entered Alaska in 1792 before its purchase by the United States. In 1872, its headquarters were moved to San Francisco and in 1905 to New York. Members: 300,000.

U. S. Church Membership, 1948-49

Source: *Christian Herald*.

Religious groups	1948	1949
Protestant bodies (over 50,000*)...	45,862,932	47,108,368
Protestant bodies (10,000-50,000*)...	1,143,174	1,267,076
Protestant bodies (under 10,000*)...	300,350	299,379
Total Protestant bodies.....	47,306,456	48,674,823
Roman Catholic.....	26,075,697	26,718,343
Jewish Congregations.....	4,641,000†	5,000,000
Other non-Protestant bodies.....	1,412,452	1,469,162
Total non-Protestant bodies.....	32,129,149	33,187,505
Total all bodies in U. S.....	79,435,605	81,862,328

* Members per body. † 1936.

Serbian Orthodox Church.—This body of the Eastern Orthodox Church has its own diocese and is under jurisdiction of the Serbian Patriarchate (Yugoslavia). Members: 80,000.

Lutheran

American Lutheran Church.—This Church is a constituent body of the American Lutheran Conference. It is itself the result of the merger in 1930 of the Evangelical Lutheran Joint Synod of Ohio and Other States (org. 1918), the Evangelical Lutheran Synod of Iowa and Other States (org. 1854), and the Lutheran Synod of Buffalo (org. 1845). Members: 692,567.

Augustana Evangelical Lutheran Church.—This group, whose constituency originally was of Swedish extraction, is a member of the American Lutheran Conference and is also a participating body in the National Lutheran Council. Organized in 1860. Members: 439,231.

Evangelical Lutheran Church.—In 1917 the United Norwegian Church, the Norwegian Synod and the Hauge Synod united under the name, Norwegian Lutheran Church of America. In 1930 this group became a constituent part of the American Lutheran Conference. The new name, The Evangelical Lutheran Church, was adopted at its General Convention in 1946. Members: 757,352.

The Evangelical Lutheran Joint Synod of Wisconsin and Other States.—This group, a constituent part of the Synodical Conference, was organized in Wisconsin in 1850. Members: 297,922.

Lutheran Church-Missouri Synod.—This group, the largest constituent part of the Synodical Conference, was organized in 1847, holds to an unwavering confessionalism and is the leader in the conservative group among the Lutherans. Members: 1,569,364.

Lutheran Free Church.—This body was organized in 1897 as the result of differences of opinion in the United Norwegian Church over control of the Augsburg Semi-

nary. It became a constituent part of the American Lutheran Conference in 1930. Members: 54,608.

United Lutheran Church in America.—This group dates back to the Ministerium of Pennsylvania, organized in 1748, and beyond that to early colonial days. It represents the union of the General Synod, the General Council, and the United Synod of the South in 1918. Members: 1,814,172.

Methodist

African Methodist Episcopal Church.—This group was formed in Philadelphia in 1816 and extended throughout the South after the Civil War. Members: 1,066,301.

African Methodist Episcopal Zion Church.—This group was organized in 1796, coming out of the John Street Methodist Church, New York. Members: 520,175.

Colored Methodist Episcopal Church.—In 1870, the General Conference of the M.E. Church, South, approved the request of its colored membership for the formation of their conferences into a separate ecclesiastical body. Members: 381,000.

The Methodist Church.—In April, 1939, the Uniting Conference forming The Methodist Church was held by representatives of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church. The Methodist Church in the United States originated with the efforts of John and Charles Wesley, leaders of the revival movement in England in the eighteenth century. Methodist emigrants from Ireland planted Methodism in America about 1760. In 1771 Francis Asbury, one of Wesley's preachers, later a Bishop, landed in Philadelphia. The Methodist Episcopal Church was organized in 1784-85. The Methodist Episcopal Church, South, dated from 1846, the separation from the Methodist Episcopal Church having taken place over the slavery issue. The Methodist Protestant Church dated from 1830, and was organized over the issue of lay representation. Members: 8,792,569.

Presbyterian

Cumberland Presbyterian Church.—In 1806, a presbytery (Cumberland) of the Presbyterian Church was dissolved by the Synod of Kentucky on account of its attitude toward revivalism. Members of the presbytery organized as an independent body in 1810 and became the Cumberland Presbyterian Church. When this body attempted to reunite with the Presbyterian Church in 1906, a minority preferred to continue as an independent church as above. Members: 80,236.

Presbyterian Church in the U. S.—This group is the branch of the Presbyterian Church which separated from the main body at the time of the Civil War. It is

often called the "Southern" Presbyterian Church. Members: 653,594.

Presbyterian Church in the United States of America.—This group, distinguished by its representative form of government and its Calvinistic theology, appeared among the earliest colonists of America. Its first church was established about 1640, its first presbytery in 1706. Members: 2,401,849.

United Presbyterian Church of North America.—This group dates back to the Reformed Presbyterian (Covenanter) Church (1643) and the Associate Presbyterian (Seceder) Church (1733), both of Scotland. These two groups appeared in America in 1774 and 1753 respectively. They united and became the Associate Reformed Presbyterian Church in 1782. A minority, however, continued as the Associate Presbyterian Church. In 1858 the two groups united and became the United Presbyterian Church. Members: 213,810.

Others

Assemblies of God.—Independent, pentecostal, evangelical, missionary churches associated for co-operative effort in district and general councils. Organized in Arkansas in 1914. Members: 275,000.

Buddhist Churches of America.—Organized in 1914 as the Buddhist Mission of North America, this group was incorporated in 1942 under the present name and represents Buddhism in this country, the faith based on "the anatman doctrine, supplemented by the idea of karma, and nirvana, the holy ease or a blissful mental state of absolute freedom from evil." Members: 70,000.

Christian Reformed Church.—A group of Dutch Calvinists which dissented from the Reformed Church in America in 1857 and which was strengthened by later accessions from the same source and by immigration. Members: 142,818.

Church of Christ, Scientist.—Founded by Mary Baker Eddy in 1879. As defined by Mrs. Eddy, Christian Science is the scientific system of divine healing and the reinstatement of primitive Christianity. Number of churches and societies: 3,024.*

Church of God.—This body, to be differentiated from the Church of God with headquarters at Anderson, Ind., is a holiness group and pentecostal. It began in 1886 in Tennessee, under the name of Christian Union, reorganized in 1902 as the Holiness Church. In 1907 it adopted the name above. Members: 106,490.

Church of God (Anderson, Ind.).—This group is one of the largest of the groups which have taken the name "Church of God." Its headquarters are at Anderson, Ind. It originated about 1880, now emphasizes Christian unity. Members: 105,022.

*Membership figure not available. The manual of the church forbids "the numbering of people and the reporting of such statistics for publication."

Church of God in Christ.—Organized in Arkansas in 1895, by C. P. Jones and C. H. Mason, who believed there was no salvation without holiness; incorporated 1897. Members: 340,530.

Church of the Brethren (Conservative Dunkers).—German pietists from Crefeld, Germany, under the leadership of Peter Becker, entered the colonies in 1719, and settled at Germantown, Philadelphia, Pa. They were called Dunkers (baptizers) and were immersionists. The members are conservative as to attire, oaths or affirmations, resistance to force, temperance, and the like. Members: 185,088.

Church of the Nazarene.—One of the larger holiness bodies, organized in Chicago, Oct., 1907. It is in general accord with the early doctrines of Methodism and emphasizes entire sanctification. Members: 220,042.

Churches of Christ.—This body is made up of a large group of churches, formerly reported with the Disciples of Christ, but since the religious census of 1906, reported separately. They are strictly congregational and have no organization larger than the local congregation. Members: 814,200.

Congregational Christian Churches.*—Congregational churches date back to the Pilgrim Fathers and the early colonists of New England in 1620. The Christian churches date back to the Wesleyan and revival movements at the end of the eighteenth century. These two groups of churches were merged at Seattle, Wash., in 1931. Members: 1,184,661.

Disciples of Christ.—In the revival period of the early nineteenth century, a movement under Thomas Campbell and his son, Alexander, resulted in the establishment of a fellowship called Christians or Disciples. Believing that sects are unscriptural, they are biblicalists and immersionists. Members: 1,738,605.

Evangelical and Reformed Church.*—This body was formed on June 26, 1934, at Cleveland, Ohio, by a union of the Evangelical Synod of North America and the Reformed Church in the United States. The union was unique in that it left all details to be adjusted afterwards. The constitution was declared in effect at the General Synod which met at Lancaster, Pa., in June, 1940. The merged boards were organized and on February 1, 1941, took over the work of the two former denominations. Members: 714,583.

Evangelical Mission Covenant Church of America.—A transplantation to the U. S., in 1885, of a free-church movement in the

Swedish state church. Until recently the name has been the Swedish Evangelical Mission Covenant. Members: 51,009.

The Evangelical United Brethren Church.—This group had its origin in Johnstown, Pa., November 16, 1946, in the consummation of organic union between the Evangelical Church and the Church of the United Brethren in Christ. Both these former communions had their beginning in Pennsylvania in the evangelistic movement of the early 19th century. Jacob Albright was the founder of the Evangelical Church, and Dr. Philip William Otterbein was the founder of the United Brethren Church in 1800. In doctrine this Church is Arminian and in government Methodist. Members: 711,537.

Federated Churches.—Actually not a denomination but a group of local churches in various parts of the country, federated under the above name. Members: 88,411.

Friends, Religious Society of (Five Years Meeting).—In 1902, twelve of the fourteen yearly meetings of Friends entered into a loose confederation, forming the Five Years Meeting. Two of the original meetings (Kansas and Oregon) have withdrawn. Ohio and Philadelphia never joined. Together, however, these yearly meetings (aside from Philadelphia Yearly Meeting, Race St.) and the Five Years Meeting form what is known as the Orthodox group of Friends. Members: 113,013.

Independent Fundamental Churches of America.—Organized in 1930, at Cicero, Ill., by representatives of various independent churches. Members: 65,000.

International Church of the Four Square Gospel.—An evangelistic missionary body organized by Almee Semple McPherson in 1927. The parent church is Angelus Temple in Los Angeles, organized in 1923, with many branch churches in the U. S. and mission stations in foreign countries. Members: 59,897.

Jewish Congregations.—Jews arrived in the colonies before 1650. The first congregation is recorded in 1656, in New York City, the Shearith Israel (Remnant of Israel). Members: 5,000,000.

Latter-Day Saints, Church of Jesus Christ of.—A group in which the Bible, the Book of Mormon, the Doctrine and Covenants and the Pearl of Great Price are regarded as the word of God. The primitive church organization is sought and the same gifts of tongues, prophecy, revelation, visions, healings and interpretation of tongues are continued. Members: 980,347.

Latter-Day Saints, Reorganized Church of Jesus Christ of.—A division among the Latter-Day Saints (Mormons) occurred on the death of Joseph Smith in 1844. His son, Joseph Smith, became presiding officer of this group, which has headquarters at Independence, Mo. Members: 121,745.

* Early in 1950, Brooklyn Supreme Court Justice Meler Stenbrink issued an injunction prohibiting the Congregational Christian Churches from merging with the Evangelical and Reformed Church. He ruled that the proposed merger had not been approved by 75% of the churches, as was required. An appeal is being made, and a hearing will probably be held late in 1950. If merger is effected, the new group will be known as the United Church in Christ.

Mennonite Church.—The largest group of the Mennonites who began arriving in the U. S. in 1683, settling in Germantown, Pa. They derive their name from Menno Simons, their outstanding leader, born 1496. Members: 56,746.

Pentecostal Church of God in America.—Organized in 1919 at Chicago. The first national convention was held in Oct., 1940. Members: 60,000.

The Protestant Episcopal Church.—This group entered the colonies with the earliest settlers as the Church of England. It became autonomous and adopted its present name in 1789. Members: 2,297,989.

Reformed Church in America.—This group was established by the earliest Dutch settlers of New York as the Reformed Protestant Dutch Church in 1628. It embraces many of the historic early colonial churches of New York and New Jersey and today has many strong churches in the middle and far west. Members: 179,085.

The Salvation Army.—An evangelistic organization, with a military government, first set up by General William Booth

(1829-1912) in England and introduced into America in 1880. Members: 215,094.

Seventh Day Adventists.—This body developed out of the Adventist movement (1833-1844), which emphasized the imminent personal return of Jesus Christ. It emphasized the observance of the seventh-day Sabbath and in 1863 was numerous enough to organize a conference. At present it has twelve world divisions and carries on extensive publishing and medical work. Members: 229,945.

Spiritualists, International General Assembly of.—Organized in Buffalo, N. Y., in 1936 for the purpose of chartering Spiritualist churches. Members: 157,000.

Unitarian Association, American.—The Unitarian movement in Congregationalism, beginning in the eighteenth century, produced the American Unitarian Association in 1825. In 1865 a national conference was organized. Members: 74,447.

The Universalist Church of America.—Originated in the U. S. about 1785. In 1866, it was incorporated as the Universalist General Convention; but in 1942, the present name was adopted. Members: 62,927.

History of the Christian Church in England

- 304(?) St. Alban martyred.
- 400(?) Ninian founds church in Scotland.
- 432(?) St. Patrick begins conversion of Ireland.
- 5th century Arrival in England of Angles, Saxons and Jutes. Church isolated from Rome.
- 597 Augustine sent to convert Saxons.
- 601 Augustine made Archbishop by Pope.
- 1170 Murder of Archbishop Becket.
- 1172 Becket is canonized.
- 1534 Act of Supremacy makes king head of Church of England.
- 1554 Church again united with Rome under reign of Mary.
- 1558 Church restored to Crown at accession of Elizabeth.
- 1611 King James Version published.

- 1646 Puritan rebellion. Presbyterianism becomes state religion.
- 1660 Restoration. Power of Church of England restored under Charles II.
- 1673 Test Act passed by Parliament. Excludes nonconformists and Roman Catholics from public office.
- 1701 Act of Succession. Sovereigns must belong to Church of England.
- 1739 John Wesley founds Methodism.
- 1828 Repeal of Test Act.
- 1829 Catholic emancipation.
- 1833-45 Oxford Movement attempts to bring Church of England closer to ideals of ancient Church. Despite conversion of Newman and others to Roman Catholicism, this movement continues as important influence in present-day Church of England.

Archbishops of Canterbury

Sequence	Name	Year created	Sequence	Name	Year created
1	Augustine (consecrated Bishop 597)	601	14	Æthelheard	793
2	Laurentius	604	15	Wulfred	805
3	Mellitus	619	16	Feologild	832
4	Justus	624	17	Ceolnoth	833
5	Honorius	627	18	Æthelred	870
6	Deusdedit	655	19	Plegmund	890
7	Theodorus	668	20	Æthelhelm	914
8	Beorhtweald	693	21	Wulfhelm	923
9	Tatwine	731	22	Oda	942
10	Nothelm	735	23	Ælfsige	959
11	Cuthbeorht	740	24	Beorhthelm	959
12	Breguwine	761	25	Dunstan	960
13	Jaenbeorht	765	26	Æthelgar	988

Archbishops of Canterbury—(cont.)

Sequence	Name	Year created	Sequence	Name	Year created
27	Sigeric Serio	990	63	Henry Chichele	1414
28	Ælfric	995	64	John Stafford	1443
29	Ælfheah	1005	65	John Kemp	1452
30	Lyfing	1013	66	Thomas Bouchier	1454
31	Æthelnoth	1020	67	John Morton	1486
32	Eadsige	1038	68	Henry Dean	1501
33	Robert (Champart) of Jumièges	1051	69	William Warham	1503
34	Stigand	1052	70	Thomas Cranmer	1533
35	Lanfranc	1070	71	Reginald Pole	1556
36	Anselm	1093	72	Matthew Parker	1559
37	Ralph d'Escures	1114	73	Edmund Grindal	1576
38	William de Corbell	1123	74	John Whitgift	1583
39	Theobald	1139	75	Richard Bancroft	1604
40	Thomas Becket	1162	76	George Abbot	1611
41	Richard (of Dover)	1174	77	William Laud	1633
42	Baldwin	1185	78	William Juxon	1660
43	Hubert Walter	1193	79	Gilbert Sheldon	1663
44	Stephen Langton	1207	80	William Sancroft	1678
45	Richard le Grant (of Wetharshed)	1229	81	John Tillotson	1691
46	Edmund Rich	1234	82	Thomas Tenison	1695
47	Boniface of Savoy	1245	83	William Wake	1716
48	Robert Kilwardby	1273	84	John Potter	1737
49	John Pecham (Peckham)	1279	85	Thomas Herring	1747
50	Robert Winchelsey	1294	86	Matthew Hutton	1757
51	Walter Reynolds	1313	87	Thomas Secker	1758
52	Simon Mepeham	1328	88	Frederick Cornwallis	1768
53	John Stratford	1333	89	John Moore	1783
54	Thomas Bradwardine	1349	90	Charles Manners-Sutton	1805
55	Simon Islip	1349	91	William Howley	1828
56	Simon Langham	1366	92	John Bird Sumner	1848
57	William Whittlesey	1368	93	Charles Thomas Longley	1862
58	Simon Sudbury	1375	94	Archibald Campbell Tait	1868
59	William Courtenay	1381	95	Edward White Benson	1883
60	Thomas Arundel	1396	96	Frederick Temple	1896
61	Roger Walden	1398	97	Randall Thomas Davidson	1903
62	Thomas Arundel (restored)	1399	98	Cosmo Gordon Lang	1928
			99	William Temple	1942
			100	Geoffrey Francis Fisher	1945

Bishops of the Protestant Episcopal Church

Source: John H. Fitzgerald, Secretary, The House of Bishops, 7301 Ridge Blvd., Brooklyn 9, N. Y.

(Note: M—Missionary Bishop; C—Coadjutor; S—Suffragan)

Presiding Bishop: Henry K. Sherrill, New York City. Vice President of National Council: John B. Bentley, New York City.

Alabama: Charles C. J. Carpenter, Randolph R. Claiborne (S), Birmingham.

Alaska: William J. Gordon (M), Nenana.

Albany (N. Y.): Frederick L. Barry.

Anking: (Vacant.)

Arizona: Arthur B. Kinsolving, II (M), Phoenix.

Arkansas: R. Bland Mitchell, Little Rock.

Atlanta (Ga.): John M. Walker.

Bethlehem (Pa.): Frank W. Sterrett.

Brazil, Central: Louis C. Melcher (M).

Brazil, Southern: Athalico T. Pithan, Porto Alegre.

Brazil, Southwestern: Egmont M. Krischke, Santa Maria.

California: Karl M. Block, San Francisco.

Chicago: Wallace E. Conkling, Charles L. Street (S).

Colorado: Harold L. Bowen, Denver.

Connecticut: Walter H. Gray, Hartford.

Cuba: Alexander H. Blankingship (M), Havana.

Dallas (Tex.): C. Avery Mason.

Delaware: Arthur R. McKinstry, Wilmington.

Easton (Md.): Allen J. Miller.

Eau Claire (Wis.): William W. Horstick.

Erie (Pa.): Harold E. Sawyer.

European Churches: J. I. B. Larned, Brooklyn, N. Y.

Florida: Frank A. Juhan, Hamilton West (C), Jacksonville.

Florida, South: John D. Wing, Henry I. Louttit (C), Orlando.

Fond du Lac (Wis.): Harwood Sturtevant.

Georgia: Middleton S. Barnwell, Savannah.

Haiti: C. A. Voegeli (M), Port-au-Prince.

Harrisburg (Pa.): J. Thomas Heistand.

- Honolulu: Harry S. Kennedy (M).
 Idaho: Frank A. Rhea (M), Boise.
 Indiana, Northern: Reginald Mallett, South Bend.
 Indianapolis: Richard A. Kirchhoffer.
 Iowa: Gordon V. Smith, Des Moines.
 Kansas: Goodrich R. Fenner, Topeka.
 Kentucky: Charles Olingman, Louisville.
 Lexington (Ky.): William R. Moody.
 Liberia: Bravid W. Harris (M), Monrovia.
 Long Island: James P. DeWolfe, Jonathan G. Sherman (S), Garden City, N. Y.
 Los Angeles: Francis E. I. Bloy, Donald J. Campbell (S).
 Louisiana: Girault M. Jones, New Orleans.
 Maine: Oliver L. Loring, Portland.
 Maryland: Noble C. Powell, Baltimore.
 Massachusetts: Norman B. Nash, Raymond A. Heron (S), Boston.
 Massachusetts, Western: William A. Lawrence, Springfield.
 Mexico: Efrain Salinas y Velasco (M), Mexico City.
 Michigan: Richard S. M. Emrich, Russell S. Hubbard (S), Detroit.
 Michigan, Northern: Herman R. Page, Marquette.
 Michigan, Western: Lewis B. Whittemore, Grand Rapids.
 Milwaukee: Benjamin F. P. Ivins.
 Minnesota: Stephen Keeler, Minneapolis.
 Mississippi: Duncan M. Gray, Jackson.
 Missouri: William Scarlett, St. Louis.
 Missouri, West: Edward R. Welles, Kansas City.
 Montana: Henry H. Daniels, Helena.
 Nebraska: Howard R. Brinker, Omaha.
 Nevada: William F. Lewis (M), Reno.
 Newark (N. J.): Benjamin M. Washburn, Theodore R. Ludlow (S).
 New Hampshire: Charles F. Hall, Concord.
 New Jersey: Wallace J. Gardner, Alfred L. Banyard (S), Trenton.
 New Mexico and Southwest Texas: James M. Stoney, Albuquerque, N. M.
 New York: W. B. Donegan, Charles F. Boynton (S), New York City.
 New York, Central: Malcolm E. Peabody, Walter M. Higley (S), Syracuse.
 New York, Western: Lauriston L. Scaife, Buffalo.
 North Carolina: Edwin A. Penick, Raleigh.
 (North) Carolina, East: Thomas H. Wright, Wilmington.
 North Carolina, Western: M. George Henry, Asheville.
 North Dakota: Douglass H. Atwill (M), Fargo.
 Ohio: Beverly D. Tucker, Nelson M. Burroughs (C), Cleveland.
 Ohio, Southern: Henry W. Hobson, Cincinnati.
 Oklahoma: Thomas Casady, Oklahoma City.
 Olympia (Wash.): Stephen F. Bayne, Jr., Seattle.
 Oregon: Benjamin D. Dagwell, Portland.
 Oregon, Eastern: Lane W. Barton (M), Bend.
 Panama Canal Zone: Reginald H. Gooden (M), Ancon.
 Pennsylvania: Oliver J. Hart, William P. Remington (S), Joseph G. Armstrong (S), Philadelphia.
 Philippines: Norman S. Binsted (M), Robert F. Wilner (S), Manila.
 Pittsburgh: Austin Pardue.
 Puerto Rico: (Vacant).
 Quincy (Ill.): William L. Essex, Peoria.
 Rhode Island: Granville G. Bennett, Providence.
 Rochester (N. Y.): Dudley S. Stark.
 Sacramento (Calif.): A. W. Noel Porter.
 Salina (Kans.): Shirley H. Nichols (M).
 San Joaquin (Calif.): Sumner F. D. Walters (M), Stockton.
 South Carolina: Thomas N. Carruthers, Charleston.
 South Carolina, Upper: John J. Gravatt, Columbia.
 South Dakota: W. Blair Roberts (M), Conrad H. Gesner (C), Sioux Falls.
 Spokane (Wash.): Edward M. Cross (M).
 Springfield (Ill.): Charles A. Clough.
 Tennessee: Edmund P. Dandridge, Nashville; Theodore N. Barth (C), Memphis.
 Texas: Clinton S. Quin, Houston; John E. Hines (C), Austin.
 Texas, North: George H. Quarterman (M), Amarillo.
 Texas, West: Everett H. Jones, San Antonio.
 Utah: Stephen C. Clark (M), Salt Lake City.
 Vermont: Vedder Van Dyck, Burlington.
 Virginia: Frederick D. Goodwin, Richmond; W. Roy Mason (S), Charlottesville; Robert F. Gibson (S), Richmond.
 Virginia, Southern: George P. Gunn, Norfolk.
 Virginia, Southwestern: Henry D. Phillips, Roanoke.
 Washington (D. C.): Angus Dun.
 West Virginia: Robert E. L. Strider, Wilburn C. Campbell (C), Wheeling.
 Wyoming: James W. Hunter, Laramie.

Bishops of the Methodist Church

Source: Methodist Church Headquarters, New York City.

- Raymond L. Archer; Singapore, Malaya.
 Theodor Arvidson; Stockholm, Sweden.
 James C. Baker; Los Angeles, Calif.
 Enrique C. Balloch; Santiago, Chile.
 L. Santi Barbieri; Buenos Aires, Argentina.
 Newell S. Booth; Elisabethville, Bel. Congo.
 J. W. E. Bowen; Atlanta, Ga.
 Charles W. Brashares; Des Moines, Iowa.
 Robert N. Brooks; New Orleans, La.
 W. Y. Chen; Chungking, China.
 Fred P. Corson; Philadelphia, Pa.
 Ralph S. Cushman; St. Paul, Minn.

Bishops of the Methodist Church—(cont.)

Dana Dawson; Topeka, Kans.
 Charles W. Flint; Washington, D. C.
 Marvin A. Franklin; Jackson, Miss.
 Paul N. Garber; Geneva, Switzerland.
 Costen J. Harrell; Charlotte, N. C.
 Ivan Lee Holt; St. Louis, Mo.
 Z. T. Kaung; Peiping, China.
 Edward W. Kelly; St. Louis, Mo.
 Gerald H. Kennedy; Portland, Oreg.
 Paul B. Kern; Nashville, Tenn.
 Willis J. King; Monrovia, Liberia.
 Carleton Lacy; Foochow, China.
 W. E. Ledden; Syracuse, N. Y.
 John Wesley Lord; Boston, Mass.
 J. Ralph Magee; Chicago, Ill.
 Paul E. Martin; Little Rock, Ark.
 W. C. Martin; Dallas, Tex.
 Shot K. Mondol; Hyderabad, India.
 Arthur J. Moore; Atlanta, Ga.
 H. Clifford Northcott; Madison, Wis.

G. Bromley Oxnham; New York, N. Y.
 W. W. Peele; Richmond, Va.
 Glenn R. Phillips; Denver, Colo.
 J. Waskom Pickett; Delhi, India.
 Clare Purcell; Birmingham, Ala.
 Richard C. Raines; Indianapolis, Ind.
 Marshall R. Reed; Detroit, Mich.
 Clement D. Rockey; Lucknow, India.
 Alexander P. Shaw; Baltimore, Md.
 Roy H. Short; Jacksonville, Fla.
 A. Frank Smith; Houston, Tex.
 W. Angie Smith; Oklahoma City, Okla.
 J. W. E. Sommer; Frankfurt, Germany.
 John A. Subhan; Bombay, India.
 Donald H. Tippet; San Francisco, Calif.
 José Valencia; Manila, Philippines.
 Ralph A. Ward; Shanghai, China.
 William T. Watkins; Louisville, Ky.
 Hazen G. Werner; Columbus, Ohio.
 Lloyd C. Wicke; Pittsburgh, Pa.

Roman Catholic Pontiffs

Source for Catholic information: *The National Catholic Almanac.*

St. Peter, of Bethsaida in Galilee, Prince of the Apostles, was the first Pope. He resided first in Antioch and then for twenty-five years in Rome, where he suffered martyrdom in 64 or 67 of the modern era. He was followed by St. Linus.

Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
St. Linus	Tuscia	67	76	St. Celestine I	Campania	422	432
St. Anacletus (Cletus)	Rome	76	88	St. Sixtus III	Rome	432	440
St. Clement	Rome	88	97	St. Leo I (the Great)	Tuscia	440	461
St. Evaristus	Greece	97	105	St. Hilary	Sardo	461	468
St. Alexander I	Rome	105	115	St. Simplicius	Tivoli	468	483
St. Sixtus I	Rome	115	125	St. Felix III (II)	Rome	483	492
St. Telesphorus	Greece	125	136	St. Gelasius I	Africa	492	496
St. Hyginus	Greece	136	140	Anastasius II	Rome	496	498
St. Pius I	Aquileia	140	155	St. Symmachus	Sardo	498	514
St. Anicetus	Syria	155	166	St. Hormisdas	Frosinone	514	523
St. Soter	Campania	166	175	St. John I	Tuscia	523	526
St. Eleutherius	Epirus	175	189	St. Felix IV (III)	Sannio	526	530
St. Victor I	Africa	189	199	Boniface II	Rome	530	532
St. Zephyrinus	Rome	199	217	John II	Rome	533	535
St. Callistus I	Rome	217	222	St. Agapitus I	Rome	535	536
St. Urban I	Rome	222	230	St. Silverius	Campania	536	537
St. Pontian	Rome	230	235	Vigilius	Rome	537	555
St. Anterus	Greece	235	236	Pelagius I	Rome	556	561
St. Fabian	Rome	236	250	John III	Rome	561	574
St. Cornelius	Rome	251	253	Benedict I	Rome	575	579
St. Lucius I	Rome	253	254	Pelagius II	Rome	579	590
St. Stephen I	Rome	254	257	St. Gregory I (the Great)	Rome	590	604
St. Sixtus II	Greece	257	258	Sabinianus	Tuscia	604	606
St. Dionysius	Unknown	259	268	Boniface III	Rome	607	607
St. Felix I	Rome	269	274	St. Boniface IV	Marsi	608	615
St. Eutychian	Luni	275	283	St. Deusdedit	Rome	615	618
St. Calixtus	Dalmatia	283	296	(Adeodatus I)			
St. Marcellinus	Rome	296	304	Boniface V	Naples	619	625
St. Marcellus I	Rome	308	309	Honorius I	Campania	625	638
St. Eusebius	Greece	309	309	Severinus	Rome	640	640
St. Melchisedes	Africa	311	314	John IV	Dalmatia	640	642
St. Sylvester I	Rome	314	335	Theodore I	Greece	642	649
St. Marcus	Rome	336	336	St. Martin I	Todi	649	655
St. Julius I	Rome	337	352	St. Eugenius I	Rome	654	657
St. Liberius	Rome	352	366	St. Vitalian	Segni	657	672
St. Damasus I	Spain	366	384	Adeodatus II	Rome	672	676
St. Siricius	Rome	384	399	Donus	Rome	676	678
St. Anastasius I	Rome	399	401	St. Agatho	Sicily	678	681
St. Innocent I	Albano	401	417	St. Leo II	Sicily	682	683
St. Zozimus	Greece	417	418	St. Benedict II	Rome	684	685
St. Boniface I	Rome	418	422				

Name	Birthplace	Acces.	End of reign	Name	Birthplace	Acces.	End of reign
John V	Syria	685	686	Benedict IX	....	1047	1048
Conon	Unknown	686	687	(3rd time)			
St. Sergius I	Syria	687	701	Damasus II	Bavaria	1048	1048
John VI	Greece	701	705	St. Leo IX	Egisheim-Dagsburg	1049	1054
John VII	Greece	705	707	Victor II	Dollnstein-Hirschberg	1055	1057
Sisinnius	Syria	708	708	Stephen X	Lorraine	1057	1058
Constantine	Syria	708	715	Nicholas II	Burgundy	1059	1061
St. Gregory II	Rome	715	731	Alexander II	Milan	1061	1073
St. Gregory III	Syria	731	741	St. Gregory VII	Tuscia	1073	1085
St. Zachary	Greece	741	752	Bl. Victor III	Benevento	1086	1087
Stephen II	Rome	752	752	Bl. Urban II	France	1088	1099
Stephen III	Rome	752	757	Paschal II	Ravenna	1099	1118
St. Paul I	Rome	757	767	Gelasius II	Gaeta	1118	1119
Stephen IV	Sicily	768	772	Callistus II	Burgundy	1119	1124
Adrian I	Rome	772	795	Honorius II	Fiagnano	1124	1130
St. Leo III	Rome	795	816	Innocent II	Rome	1130	1143
Stephen V	Rome	816	817	Celestine II	Citta di Castello	1143	1144
St. Paschal I	Rome	817	824				
Eugenius II	Rome	824	827	Lucius II	Bologna	1144	1145
Valentine	Rome	827	827	Bl. Eugene III	Pisa	1145	1153
Gregory IV	Rome	827	844	Anastasius IV	Rome	1153	1154
Sergius II	Rome	844	847	Adrian IV	England	1154	1159
St. Leo IV	Rome	847	855	Alexander III	Siena	1159	1181
Benedict III	Rome	855	858	Lucius III	Lucca	1181	1185
St. Nicholas	Rome	858	867	Urban III	Milan	1185	1187
Adrian II	Rome	867	872	Gregory VIII	Benevento	1187	1187
John VIII	Rome	872	882	Clement III	Rome	1187	1191
Marinus I	Gallese	882	884	Celestine III	Rome	1191	1198
St. Adrian III	Rome	884	885	Innocent III	Anagni	1198	1216
Stephen VI	Rome	885	891	Honorius III	Rome	1216	1227
Formosus	Portus	891	896	Gregory IX	Anagni	1227	1241
Boniface VI	Rome	896	896	Celestine IV	Milan	1241	1241
Stephen VII	Rome	896	897	Innocent IV	Genoa	1243	1254
Romanus	Gallese	897	897	Alexander IV	Anagni	1254	1261
Theodore II	Rome	897	897	Urban IV	Troyes	1261	1264
John IX	Tivoli	898	900	Clement IV	France	1265	1268
Benedict IV	Rome	900	903	Bl. Gregory X	Piacenza	1271	1276
Leo V	Ardea	903	903	Bl. Innocent V	Savoy	1276	1276
Sergius III	Rome	904	911	Adrian V	Genoa	1276	1276
Anastasius III	Rome	911	913	John XXI	Portugal	1276	1277
Landus	Sabina	913	914	Nicholas III	Rome	1277	1280
John X	Tossignano	914	928	Martin IV	France	1281	1285
Leo VI	Rome	928	928	Honorius IV	Rome	1285	1287
Stephen VIII	Rome	928	931	Nicholas IV	Ascoli	1288	1292
John XI	Rome	931	935	St. Celestine V	Isernia	1294	1294
Leo VII	Rome	938	939	Boniface VIII	Anagni	1294	1303
Stephen IX	Rome	939	942	Bl. Benedict XI	Treviso	1303	1304
Marinus II	Rome	942	946	Clement V	France	1305	1314
Agapitus II	Rome	946	955	John XXII	Cahors	1316	1384
John XII	Tusculum	955	964	Benedict XII	France	1334	1342
Leo VIII	Rome	963	965	Clement VI	France	1342	1352
Benedict V	Rome	964	966	Innocent VI	France	1352	1362
John XIII	Rome	965	972	Bl. Urban V	Grimoard	1362	1370
Benedict VI	Rome	973	974	Gregory XI	France	1370	1378
Benedict VII	Rome	974	983	Urban VI	Naples	1378	1389
John XIV	Pavia	983	984	Boniface IX	Naples	1389	1404
John XV	Rome	985	996	Innocent VII	Sulmona	1404	1406
Gregory V	Saxony	996	999	Gregory XII	Venetia	1406	1415
Sylvester II	Alvernia	999	1003	Martin V	Rome	1417	1431
John XVII	Rome	1003	1003	Eugene IV	Venetia	1431	1447
John XVIII	Rome	1004	1009	Nicholas V	Sarzana	1447	1455
Sergius IV	Rome	1009	1012	Callistus III	Valencia	1455	1458
Benedict VIII	Tusculum	1012	1024	Pius II	Siena	1458	1464
John XIX	Tusculum	1024	1032	Paul II	Venetia	1464	1471
Benedict IX*	Tusculum	1032	1044	Sixtus IV	Savona	1471	1484
Sylvester III	Rome	1045	1045	Innocent VIII	Genoa	1484	1492
Benedict IX	....	1045	1045	Alexander VI	Valencia	1492	1503
(2nd time)				Pius III	Siena	1503	1503
Gregory VI	Rome	1045	1046	Julius II	Savona	1503	1513
Clement II	Saxony	1046	1047	Leo X	Florence	1513	1521
				Adrian VI	Utrecht	1522	1523
				Clement VII	Florence	1523	1534

* If the triple removal of Benedict IX was not valid, Sylvester III, Gregory VI and Clement II were antipopes.

Roman Catholic Pontiffs—(cont.)

Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
Paul III	Rome	1534	1549	Innocent XI	Como	1676	1689
Julius III	Rome	1550	1555	Alexander VIII	Venetia	1689	1691
Marcellus II	Montepulciano	1555	1555	Innocent XII	Naples	1691	1700
Paul IV	Naples	1555	1559	Clement XI	Urbino	1700	1721
Pius IV	Milan	1559	1565	Innocent XIII	Rome	1721	1724
St. Pius V	Bosco	1566	1572	Benedict XIII	Rome	1724	1730
Gregory XIII	Bologna	1572	1585	Clement XII	Florence	1730	1740
Sixtus V	Grottammare	1585	1590	Benedict XIV	Bologna	1740	1758
Urban VII	Rome	1590	1590	Clement XIII	Venetia	1758	1769
Gregory XIV	Cremona	1590	1591	Clement XIV	Rimini	1769	1774
Innocent IX	Bologna	1591	1591	Pius VI	Cesena	1775	1799
Clement VIII	Florence	1592	1605	Pius VII	Cesena	1800	1823
Leo XI	Florence	1605	1605	Leo XII	Fabriano	1823	1829
Paul V	Rome	1605	1621	Pius VIII	Cingoli	1829	1830
Gregory XV	Bologna	1621	1623	Gregory XVI	Belluno	1831	1846
Urban VIII	Florence	1623	1644	Pius IX	Senigallia	1846	1878
Innocent X	Rome	1644	1655	Leo XIII	Carpineto	1878	1903
Alexander VII	Siena	1655	1667	Pius X	Riese	1903	1914
Clement IX	Pistoia	1667	1669	Behedict XV	Genoa	1914	1922
Clement X	Rome	1670	1676	Pius XI	Desio	1922	1939
				Pius XII	Rome	1939	

NOTE: This list of Popes, adapted from the *Annuario Pontificio*, is in accordance with the recent revisions made by Monsignor Mercati, Prefect of the Vatican's archives. All Popes before Sylvester I are listed as martyrs; other martyrs were: St. John I, St. Silverius and St. Martin I. The accession year is that during which the Pope was elected.

Antipopes

Antipopes were those who falsely claimed Papal Sovereignty. The dates and, in some cases, Roman numerals after the names account for occasional discrepancies in the succession of the Popes.

Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
St. Hippolytus	Rome	217	235	Clement III	Parma	1080	1100
Novatian	Rome	251	...	Theodorik	.....	....	1100
Felix II	Rome	355	365	Albert	.....	....	1102
Ursinus	.....	366	367	Sylvester IV	Rome	1105	1111
Eulalius	.....	418	419	Gregory VIII	France	1118	1121
Lawrence	.....	498	501	Celestine II	Rome	....	1124
Dioscorus	Alexandria	530	530	Anacletus II	Rome	1130	1138
Theodore	.....	...	687	Victor IV	.....	1138	1138
Paschal	.....	...	687	Victor IV*	Montecelio	1159	1164
Constantine	Nepi	767	769	Paschal III	.....	1164	1168
Philip	.....	768	768	Callistus III	Arezzo	1168	1178
John	.....	...	844	Innocent III	Sezze	1179	1180
Anastasius	.....	855	855	Nicholas V	Corvaro	1328	1330
Christopher	Rome	903	904	Clement VII	.....	1378	1394
Boniface VII	Rome	974	974	Benedict XIII	Aragon	1394	1423
Boniface VII	.....	984	985	Alexander V	Crete	1409	1410
(2nd time)				John XXIII	Naples	1410	1415
John XVI	Rossano	997	998	Felix V	.....	1439	1449
Gregory	.....	...	1012				
Benedict X	Rome	1058	1059				
Honorius II	Verona	1061	1072				

* Did not recognize his predecessor of 1138, who, only two months after claiming the Papacy, submitted to the rightful Pope, Innocent II.

The College of Cardinals

(NOTE: When complete, the College of Cardinals has 70 members, of whom 6 are cardinal bishops, 50 are cardinal priests and 14 are cardinal deacons. At present, there are 54 members, of whom 6 are cardinal bishops, 44 are cardinal priests and 3 are cardinal deacons.)

Cardinal Bishops

Year of creation	Name	Office or dignity	Nationality
1930	Francesco Marchetti-Selvaggiani	Bishop of Ostia and Frascati; Vicar General of His Holiness; Dean of the College of Cardinals; Archpriest of the Patriarchal Basilica of the Lateran; Secretary of the Congregation of the Holy Office	Italian
1936	Eugene Tisserant	Bishop of Porto and Santa Rufina; Secretary of the Congregation for the Oriental Church	French

Year of creation	Name	Office or dignity	Nationality
1937	Giuseppe Pizzardo	Bishop of Albano; Prefect of the Congregation of Seminaries and Universities	Italian
1937	Adeodato Giovanni Piazza, O. C. D.	Bishop of Sabina; Secretary of the Consistorial Congregation	Italian
1946	Clemente Micara	Bishop of Velletri; Prefect of the Congregation of Rites	Italian
1946	Benedetto Aloisi Masella	Bishop of Palestrina; Pro-Prefect of the Sacred Congregation of the Sacraments	Italian

Cardinal Priests

Year of creation	Name	Office or dignity	Nationality
1916	Alessio Ascalesi	Archbishop of Naples	Italian
1921	Michael von Faulhaber	Archbishop of Munich and Freising	German
1921	Dennis J. Dougherty	Archbishop of Philadelphia	American
1923	Giovanni B. Nasalli-Rocca di Corneliano	Archbishop of Bologna	Italian
1925	Alessandro Verde	Archpriest of Liberian Patriarchal Basilica of St. Mary Major	Italian
1927	Joseph Ernest Van Roey	Archbishop of Malines	Belgian
1927	Pedro Segura y Saenz	Archbishop of Seville	Spanish
1929	Ildefonso Schuster, O. S. B.	Archbishop of Milan	Italian
1929	Manuel Goncalves Cerejeira	Patriarch of Lisbon	Portuguese
1930	Achilles Lienart	Bishop of Lille	French
1933	Pietro Fumasoni-Biondi	Prefect of the Congregation for the Propagation of the Faith	Italian
1933	Federico Tedeschini	Archpriest of Vatican Basilica; Prefect of the Congregation of the Basilica of St. Peter; Apostolic Datary	Italian
1933	Maurilio Fossati	Archbishop of Turin	Italian
1933	Ella dalla Costa	Archbishop of Florence	Italian
1933	Theodore Innitzer	Archbishop of Vienna	Austrian
1935	Ignatius Tappouni	Syrian Patriarch of Antioch	Iraqian
1935	Santiago Copello	Archbishop of Buenos Aires	Argentine
1935	Domenico Jorio	Prefect of the Congregation of the Sacraments	Italian
1935	Massimo Massimi	Prefect of the Supreme Tribunal of the Apostolic Signature; President of the Commission on the Authentic Interpretation of the Code of Canon Law; Camerlengo of the College of Cardinals.	Italian
1937	Pierre Marie Gerlier	Archbishop of Lyons	French
1946	Gregory Peter XV Agagianian	Patriarch of Cilicia in Armenia	Trans-caucasian
1946	Adam Stephen Sapieha	Archbishop of Cracow	Polish
1946	Edward Mooney	Archbishop of Detroit	American
1946	Jules Saliège	Archbishop of Toulouse	French
1946	James McGuigan	Archbishop of Toronto	Canadian
1946	Samuel A. Stritch	Archbishop of Chicago	American
1946	Emile Roques	Archbishop of Rennes	French
1946	Jon De Jong	Archbishop of Utrecht	Dutch
1946	Carlo Carmelo de Vasconcellos Motta	Archbishop of São Paulo	Brazilian
1946	Norman Gilroy	Archbishop of Sydney	Australian
1946	Francis J. Spellman	Archbishop of New York	American
1946	Jose Maria Caro Rodriguez	Archbishop of Santiago	Chilean
1946	Teodosio Clemente de Gouveia	Archbishop of Lourenço Marques, Mozambique	Portuguese
1946	Jaime de Barros Camara	Archbishop of Rio de Janeiro	Brazilian
1946	Enrique Pla y Deniel	Archbishop of Toledo and Primate of Spain	Spanish
1946	Manuel Arteaga y Betancourt	Archbishop of Havana	Cuban

The College of Cardinals—(cont.)

Year of creation	Name	Office or dignity	Nationality
1946	Joseph Frings	Archbishop of Cologne	German
1946	Juan Gualberto Guevara	Archbishop of Lima	Peruvian
1946	Bernard Griffin	Archbishop of Westminster	English
1946	Josef Mindszenty	Archbishop of Esztergom and Primate of Hungary	Hungarian
1946	Ernesto Ruffini	Archbishop of Palermo	Italian
1946	Konrad von Preysing	Bishop of Berlin	German
1946	Antonio Caggiano	Bishop of Rosario	Argentine
1946	Thomas Tien, S. V. D.	Archbishop of Peiping	Chinese

Cardinal Deacons

1935	Nicola Canali	Grand Penitentiary; President of the Commission charged with the Administration of Vatican City	Italian
1936	Giovanni Mercati	Librarian and Archivist of the Holy Roman Church	Italian
1946	Giuseppe Bruno	Prefect of the Congregation of the Council; Secretary of the Commission of the Authentic Interpretation of the Code of Canon Law	Italian

Roman Catholic Hierarchy of the U. S.

(Source: National Catholic Almanac.)

(Note: A—Auxiliary; C—Coadjutor)

Archbishops

Baltimore, Md.: Francis P. Keough; Lawrence J. Shehan (A).	Newark, N. J.: Thomas J. Walsh; James A. McNulty (A).
Boston, Mass.: Richard J. Cushing; Eric F. MacKenzie (A); Thos. F. Markham (A).	New Orleans, La.: Joseph F. Rummel; L. Abel Caillouet (A).
Chicago, Ill.: Samuel Cardinal Stritch; Bernard J. Shell (A); William D. O'Brien (A); William E. Cousins (A).	New York, N. Y.: Francis Cardinal Spellman; Stephen J. Donahue (A); Joseph P. Donahue (A); Joseph F. Flannelly (A); Thomas J. McDonnell (A).
Cincinnati, Ohio: John T. McNicholas, O. P.; George J. Rehring (A).	Omaha, Nebr.: Gerald T. Bergan.
Denver, Colo.: Urban J. Vehr.	Philadelphia, Pa.: Dennis Cardinal Dougherty; Hugh L. Lamb (A); Joseph C. McCormick (A).
Detroit, Mich.: Edward Cardinal Mooney; Stephen S. Woznicki (A); Allen J. Babcock (A).	Portland, Oreg.: Edward D. Howard.
Dubuque, Iowa: Henry P. Rohlfman; Leo Binz (C).	St. Louis, Mo.: Joseph E. Ritter; John P. Cody (A); Charles H. Helmsing (A).
Indianapolis, Ind.: Paul C. Schulte.	St. Paul, Minn.: John G. Murray; James J. Byrne (A).
Los Angeles, Calif.: J. Francis A. McIntyre; Joseph T. McGucken (A); Timothy Manning (A).	San Antonio, Tex.: Robert E. Lucey.
Louisville, Ky.: John A. Floersch.	San Francisco, Calif.: John J. Mitty; Hugh A. Donohoe (A); James T. O'Dowd (A).
Milwaukee, Wis.: Moses E. Kiley; Roman R. Atkielski (A).	Santa Fe, N. Mex.: Edwin V. Byrne.
	Washington, D. C.: Patrick A. O'Boyle; John M. McNamara (A).

Bishops

Albany, N. Y.: Edmund F. Gibbons; William A. Scully (C).	Buffalo, N. Y.: John F. O'Hara, C.S.C.; Joseph A. Burke (A).
Alexandria, La.: Charles P. Greco.	Burlington, Vt.: Edward F. Ryan.
Altoona, Pa.: Richard T. Guilfoyle.	Camden, N. J.: Bartholomew J. Eustace.
Amarillo, Tex.: Lawrence J. FitzSimon.	Charleston, S. C.: John J. Russell.
Austin, Tex.: Louis J. Reicher.	Cheyenne, Wyo.: Patrick A. McGovern; Hubert M. Newell (C).
Baker City, Oreg.: Joseph F. McGrath; Leo F. Fahey (C).	Cleveland, Ohio: Edward F. Hoban; Floyd L. Begin (A).
Belleville, Ill.: Albert R. Zuroweste.	Columbus, Ohio: Michael J. Ready; Edward G. Hettinger (A).
Bismarck, N. Dak.: Vincent J. Ryan.	Corpus Christi, Tex.: Mariano S. Garriga.
Boise, Idaho: Edward J. Kelly.	Covington, Ky.: William T. Mulloy.
Brooklyn, N. Y.: Thomas E. Molloy; Raymond A. Kearney (A).	

- Crookston, Minn.: Francis J. Schenk.
 Dallas, Tex.: Joseph P. Lynch; Augustine Dangelmayr (A).
 Davenport, Iowa: Ralph L. Hayes.
 Des Moines, Iowa: Edward C. Daly, O.P.
 Duluth, Minn.: Thomas A. Welch.
 El Paso, Tex.: Sidney M. Metzger.
 Erie, Pa.: John M. Gannon; Edward P. McManaman (A).
 Evansville, Ind.: Henry J. Grimmelsman.
 Fall River, Mass.: James E. Cassidy; James L. Connolly (C).
 Fargo, N. Dak.: Aloysius J. Muench; Leo F. Dworschak (A).
 Fort Wayne, Ind.: John F. Noll.
 Gallup, N. M.: Bernard T. Espelage, O.F.M.
 Galveston, Tex.: Christopher E. Byrne; Wendelin J. Nold (C).
 Grand Island, Nebr.: Edward J. Hunkeler.
 Grand Rapids, Mich.: Francis J. Haas.
 Great Falls, Mont.: William J. Condon.
 Green Bay, Wis.: Stanislaus V. Bona; John B. Grellinger (A).
 Harrisburg, Pa.: George L. Leech.
 Hartford, Conn.: Henry J. O'Brien.
 Helena, Mont.: Joseph M. Gilmore.
 Joliet, Ill.: Martin D. McNamara.
 Kansas City, Kans.: George J. Donnelly.
 Kansas City, Mo.: Edwin V. O'Hara; Joseph Marling, C.Pp.S. (A).
 La Crosse, Wis.: John P. Treacy.
 Lafayette, Ind.: John G. Bennett.
 Lafayette, La.: Jules B. Jeanmard.
 Lansing, Mich.: Joseph H. Albers.
 Lincoln, Nebr.: Louis B. Kucera.
 Little Rock, Ark.: Albert L. Fletcher.
 Madison, Wis.: William P. O'Connor.
 Manchester, N. H.: Matthew F. Brady.
 Marquette, Mich.: Thomas L. Noa.
 Mobile, Ala.: Thomas J. Toolen.
 Monterey-Fresno, Calif.: Philip G. Scher; Aloysius J. Willinger, C.Ss.R. (C).
 Nashville, Tenn.: William L. Adrian.
 Natchez, Miss.: Richard O. Gerow.
 Ogdensburg, N. Y.: Bryan J. McEntegart.
 Oklahoma City-Tulsa, Okla.: Eugene J. McGuinness.
 Owensboro, Ky.: Francis R. Cotton.
 Paterson, N. J.: Thomas A. Boland.
 Peoria, Ill.: Joseph H. Schlarmann.
 Pittsburgh, Pa.: Hugh C. Boyle; John F. Dearden (C).
 Portland, Maine: Joseph E. McCarthy; Daniel J. Feeney (A).
 Providence, R. I.: Russell J. McVinney.
 Pueblo, Colo.: Joseph C. Willging.
 Raleigh, N. C.: Vincent S. Waters.
 Rapid City, S. Dak.: William T. McCarty, C.Ss.R.
 Reno, Nev.: Thomas K. Gorman.
 Richmond, Va.: Peter L. Ireton.
 Rochester, N. Y.: James E. Kearney.
 Rockford, Ill.: John J. Boylan.
 Sacramento, Calif.: Robert J. Armstrong.
 Saginaw, Mich.: William F. Murphy.
 St. Augustine, Fla.: Joseph P. Hurley; Thomas J. McDonough (A).
 St. Cloud, Minn.: Joseph F. Busch; Peter W. Bartholome (C).
 St. Joseph, Mo.: Charles H. Le Blond.
 Salina, Kans.: Francis A. Thill.
 Salt Lake City, Utah: Duane G. Hunt; Leo J. Steck (A).
 San Diego, Calif.: Charles F. Buddy.
 Savannah-Atlanta, Ga.: Gerald P. O'Hara; Francis E. Hyland (A).
 Scranton, Pa.: William J. Hafey; Henry T. Klonowski (A).
 Seattle, Wash.: Thomas A. Connolly.
 Sioux City, Iowa: Joseph M. Mueller.
 Sioux Falls, S. Dak.: William O. Brady.
 Spokane, Wash.: Charles D. White.
 Springfield, Ill.: William A. O'Connor.
 Springfield, Mass.: Christopher J. Weldon.
 Steubenville, Ohio: John K. Mussio.
 Superior, Wis.: Albert G. Meyer.
 Syracuse, N. Y.: Walter A. Foery.
 Toledo, Ohio: Karl J. Alter.
 Trenton, N. J.: George W. Ahr.
 Tucson, Ariz.: Daniel J. Gercke.
 Wheeling, W. Va.: John J. Swint.
 Wichita, Kans.: Mark K. Carroll.
 Wilmington, Del.: Edmond J. Fitzmaurice.
 Winona, Minn.: Edward J. Fitzgerald.
 Worcester, Mass.: John J. Wright.
 Youngstown, Ohio: James A. McFadden; Emmet M. Walsh (C).
 Army and Navy: Francis Cardinal Spellman, Military Vicar; William Arnold, Military Delegate; James H. Griffiths, Military Delegate.
 Belmont, N. C. (Abbacy Nullius): Vincent G. Taylor, O.S.B.
 Philadelphia, Pa. (Byzantine Rite): Constantine Bohachevsky; Ambrose A. Senyshyn, O.S.B.M. (A).
 Pittsburgh, Pa. (Greek Rite): Daniel Ivancho.

Jewish Congregational and Rabbinical Organizations

Source: Questionnaires to the organizations.

- Central Conference of American Rabbis: P.O. Box 722, Macon, Ga. Founded: 1889. Members: 615. Adm. Sec.: Rabbi Isaac E. Marcuson.
 Rabbinical Assembly of America: 3080 Broadway, New York 27, N. Y. Founded: 1901. Members: 460. Pres.: Rabbi Max D. Davidson.
 Rabbinical Council of America, Inc.: 331 Madison Ave., New York 17, N. Y. Founded: 1935. Members: 425. Pres.: Rabbi Samuel Berliant.
 Synagogue Council of America: 110 W. 42nd St., New York 18, N. Y. Founded: 1926. Members: 6, comprising national congregational and rabbinical bodies of U. S. Pres.: Dr. Bernard J. Bamberger.
 Union of American Hebrew Congrega-

tions: 34 W. 6th St., Cincinnati 2, Ohio; 3 E. 65th St., New York 21, N. Y. Founded: 1873. Members: 415 Reform Jewish Congregations. Pres.: Rabbi Maurice N. Eisen-drath.

Union of Orthodox Rabbis of the U. S. and Canada: 132 Nassau St., New York 7, N. Y. Founded: 1902. Members: 550. Chm. of Presidium: Rabbi Israel Rosenberg.

The United Synagogue of America: 3080 Broadway, New York 27, N. Y. Founded: 1913. Members: 400. Ch. Exec.: Dr. Simon Greenberg.

Union of Orthodox Jewish Congregations of America: 305 Broadway, New York 7, N. Y. Founded: 1898. Members: 500 congregations. Pres.: William B. Herlands.

Religious and Secular Holidays, 1951

NEW YEAR'S DAY—Monday, Jan. 1—A legal holiday in all states and the District of Columbia, New Year's Day has its origin in Roman times, when sacrifices were offered to Janus, the two-faced Roman deity who looked back on the past and forward to the future.

EPIPHANY—Saturday, Jan. 6—Falls the twelfth day after Christmas and commemorates the manifestation of Jesus as the Son of God, as represented by the adoration of the Magi, the baptism of Jesus, and the miracle of the wine at the marriage feast at Cana. Epiphany originally marked the beginning of the carnival season preceding Lent, and the evening (sometimes the eve) is known as Twelfth Night.

SHROVE TUESDAY—Feb. 6—Falls the day before Ash Wednesday and marks the end of the carnival season, which once began on Epiphany but is now usually celebrated the last three days before Lent. In France, the day is known as Mardi Gras (Fat Tuesday), and Mardi Gras celebrations are also held in several American cities, particularly in New Orleans. The day is sometimes called Pancake Tuesday by the English because of the need of using up fats which were prohibited during Lent.

ASH WEDNESDAY—Feb. 7—The first day of the Lenten season, which lasts forty days. Having its origin sometime before A.D. 1000, it is a day of public penance and is marked in the Roman Catholic Church by the burning of the palms blessed on the previous Palm Sunday. With his thumb, the priest then marks a cross upon the forehead of each worshipper. The Anglican Church and a few Protestant groups in the United States also celebrate the day, but generally without the use of ashes.

LINCOLN'S BIRTHDAY—Monday, Feb. 12—A legal holiday in many states, this day was first formally observed in Washington, D. C., in 1866, when both houses of Congress gathered for a memorial address in honor of the dead President.

ST. VALENTINE'S DAY—Wednesday, Feb. 14—This day is the festival of two 3rd-century martyrs, both named St. Valentine. It is not known why this day is associated with lovers. It may derive from an old pagan festival about this time of year, or it may have been inspired by the belief that birds mate on this day.

WASHINGTON'S BIRTHDAY—Thursday, Feb. 22—The birthday of George Washington is celebrated as a legal holiday in every state of the Union, the District of Columbia and all territories. The observance began in 1796, three years before his death.

ST. PATRICK'S DAY—Saturday, March 17—St. Patrick, patron saint of Ireland, has been honored in America since the first days of the nation. There are many dinners and meetings and perhaps the most notable part of the observance is the annual St. Patrick's Day parade on Fifth Avenue in New York City.

PALM SUNDAY—March 18—Is observed the Sunday before Easter to commemorate the entry of Jesus into Jerusalem. The procession and the ceremonies introducing the benediction of palms probably had their origin in Jerusalem. It seems certain that the bearing of the palms during services was the earlier practice, then came the procession, and later the benediction of the palms.

GOOD FRIDAY—March 23—This day commemorates the Crucifixion, which is retold during services from the Gospel according to St. John. A feature in Roman Catholic churches is the Mass of the Presanctified: there is no Consecration, the Host having been consecrated the previous day. The eating of hot cross buns on this day is said to have started in England.

EASTER SUNDAY—March 25—Observed in all Christian churches, Easter is the principal feast of the ecclesiastical year, and commemorates the Resurrection of Jesus. It is celebrated on the first Sunday after the full moon which occurs on or next after March 21 and is therefore celebrated between March 22 and April 25 inclusive. This date was fixed by the Council of Nicaea in 325. The Venerable Bede, the English monk and ecclesiastical historian, claimed the word to have originated from the Anglo-Saxon *Eôstre*, old Teutonic goddess of spring.

FIRST DAY OF PASSOVER (Pesach)—Saturday, April 21 (Nisan 15)—The Feast of the Passover, also called the Feast of Unleavened Bread, commemorates the escape of the first-born of the Jews from the Angel of Death, who took from the Egyptians their first-born, thus fulfilling

the prophecy of Moses. As the Jews fled Egypt, they ate unleavened bread, and from that time the Jews have allowed no leavening in the houses during Passover, bread being replaced by matzoth.

ASCENSION DAY—Thursday, May 3—Took place in the presence of His apostles 40 days after the Resurrection of Jesus. It is traditionally held to have occurred on Mount Olivet in Bethany.

PENTECOST (Whitsunday)—May 13—This day commemorates the descent of the Holy Ghost upon the Apostles fifty days after the Resurrection. The sermon by the Apostle Peter, which led to the baptism of 3000 who professed belief, originated the ceremonies that have since been followed. "Whitsunday" is believed to have come from "white Sunday" when, among the English, white robes were worn by those baptized on the day.

MEMORIAL DAY—Wednesday, May 30—Also known as Decoration Day. Memorial Day is a legal holiday in all the northern states and in the territories, and is also observed by the armed forces. In 1868, General John A. Logan, Commander in Chief of the Grand Army of the Republic, issued an order designating the day as one in which the graves of soldiers would be decorated. The holiday was originally devoted to honoring the memory of those who fell in the Civil War, but is now also dedicated to the memory of the dead of all wars.

FIRST DAY OF SHABUOTH (Hebrew Pentecost)—Sunday, June 10 (Sivan 6)—This festival, sometimes called the Feast of Weeks, or of Harvest, or of the First Fruits, falls fifty days after Passover and originally celebrated the end of the seven-week grain harvesting season. In later tradition, it also celebrated the giving of the Law to Moses on Mt. Sinai, and both aspects have come down to the present.

FLAG DAY—Thursday, June 14—This day commemorates the adoption by the Continental Congress on June 14, 1777, of the Stars and Stripes as the U. S. flag. Although it is a legal holiday only in Pennsylvania, President Truman, on Aug. 3, 1949, signed a bill requesting the President to call for its observance each year by proclamation.

INDEPENDENCE DAY—Wednesday, July 4—The day of the adoption of the Declaration of Independence in 1776, celebrated in all states and territories. The observance began in the next year in Philadelphia.

LABOR DAY—Monday, Sept. 3—Observed the first Monday in September in all states and territories, Labor Day was first celebrated in New York in 1882 under the sponsorship of the Central Labor Union, following the suggestion of Peter J. McGuire, of the Knights of Labor, that the day be set aside in honor of labor.

FIRST DAY OF ROSH HASHANA (Jewish New Year)—Monday, Oct. 1 (Tishri 1)—This day marks the beginning of the Jewish year 5711 and opens the Ten Days of Penitence, closing with Yom Kippur.

YOM KIPPUR (Day of Atonement)—Wednesday, Oct. 10 (Tishri 10)—This day marks the end of the Ten Days of Penitence that began with Rosh Hashana and is the holiest day of the Jewish year. It is described in *Leviticus* as the "Sabbath of Sabbaths," and synagogue services begin the preceding sundown, resume the following morning, and continue through the day to sundown. Daily pursuits are refrained from, and the day is spent in prayers, fasting, and penitence.

COLUMBUS DAY—Friday, Oct. 12—A legal holiday in many states, commemorating the discovery of America by Columbus in 1492. Quite likely the first celebration of Columbus Day was that organized in 1792 by the Society of St. Tammany, or Columbian Order, more widely known as Tammany Hall.

FIRST DAY OF SUKKOTH (Feast of Tabernacles)—Monday, Oct. 15 (Tishri 15)—This festival, also known as the Feast of the Ingathering, originally celebrated the fruit harvest, and the name comes from the booths or tabernacles in which the Jews lived during the harvest, although one tradition traces it to the shelters used by the Jews in their wandering through the wilderness. During the festival, many Jews build small huts in their back yards or on the roofs of houses.

ELECTION DAY (in certain states)—Tuesday, Nov. 6—Since 1845, by Act of Congress, the first Tuesday after the first Monday in November is the date for choosing Presidential electors. State elections are also generally held on this day.

ARMISTICE DAY—Sunday, Nov. 11—Commemorates the signing of the Armistice ending World War I in 1918. A Congressional resolution in 1926 directed the President to issue a proclamation annually for observance of the day. It is a legal holiday in many states and in others observance is asked by proclamation of the governors. As part of the day's observance, two minutes of silence are included in the ceremonies honoring the memories of the war dead. The most notable observance is at the Tomb of the Unknown Soldier in Arlington Cemetery, in Arlington, Va.

THANKSGIVING—Thursday, Nov. 22—Observed nationally on the fourth Thursday in November by Act of Congress (1941), the first such national proclamation having been issued by President Lincoln in 1863, on the urging of Mrs. Sarah J. Hale, editor of *Godey's Lady's Book*. Most Americans believe that the holiday dates back to the day of thanks ordered by Governor Bradford of Plymouth Colony in New England in 1621 but

scholars point out that days of thanks stem from ancient times.

FIRST SUNDAY IN ADVENT—Dec. 2—Advent is the season in which the faithful must prepare themselves for the advent of the Saviour on Christmas. The four Sundays before Christmas are marked by special church services.

FIRST DAY OF HANUKKAH (Festival of Lights)—Monday, Dec. 24 (Kislev 25)—This festival was instituted by Judas Maccabaeus in 165 B.C. to celebrate the purification of the Temple of Jerusalem, which had been desecrated three years earlier by Antiochus Epiphanes, who set up a pagan altar and offered sacrifices to Zeus Olympus. In Jewish homes, a light is lighted the first night, and on each succeeding night of the eight-day festival, another is lighted.

CHRISTMAS (Feast of the Nativity)—Tuesday, Dec. 25—The most important and the most widely celebrated holiday of the Christian year, it is observed as the anniversary of the birth of Jesus. Christmas customs are centuries old. The mistletoe, for example, comes from the Druids, who, in hanging the mistletoe, hoped for peace and good fortune. Use of such plants as holly comes from the ancient belief that such plants blossomed at Christmas. Comparatively recent is the Christmas tree, first set up in Germany in the 17th century, and the use of candles on trees developed from the belief that candles appeared by miracle on the trees at Christmas. Colonial Manhattan Islanders introduced the name Santa Claus, a corruption of the Dutch name for the 4th-century Asia-Minor St. Nicholas.

Movable Holidays, 1951 to 1960

CHRISTIAN AND SECULAR

Year	Ash Wed.	Easter	Pentecost	Labor Day	Election Day	Thanks-giving	1st Sun. Advent
1951	Feb. 7	Mar. 25	May 13	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1952	Feb. 27	Apr. 13	June 1	Sept. 1	Nov. 4	Nov. 27	Nov. 30
1953	Feb. 18	Apr. 5	May 24	Sept. 7	Nov. 3	Nov. 26	Nov. 29
1954	Mar. 3	Apr. 18	June 6	Sept. 6	Nov. 2	Nov. 25	Nov. 28
1955	Feb. 23	Apr. 10	May 29	Sept. 5	Nov. 8	Nov. 24	Nov. 27
1956	Feb. 15	Apr. 1	May 20	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1957	Mar. 6	Apr. 21	June 9	Sept. 2	Nov. 5	Nov. 28	Dec. 1
1958	Feb. 19	Apr. 6	May 25	Sept. 1	Nov. 4	Nov. 27	Nov. 30
1959	Feb. 11	Mar. 29	May 17	Sept. 7	Nov. 3	Nov. 26	Nov. 29
1960	Mar. 2	Apr. 17	June 5	Sept. 5	Nov. 8	Nov. 24	Nov. 27

Shrove Tuesday: 1 day before Ash Wednesday.

Palm Sunday: 7 days before Easter.

Maundy Thursday: 3 days before Easter.

Good Friday: 2 days before Easter.

Holy Saturday: 1 day before Easter.

Ascension Day: 10 days before Pentecost.

Trinity Sunday: 7 days after Pentecost.

Corpus Christi: 11 days after Pentecost.

JEWISH

Year	Purim	1st day Passover	1st day Shabuoth	1st day Rosh Hashana	Yom Kippur	1st Day Sukkoth	Simhath Torah	1st Day Hanukkah
1951	Mar. 22	Apr. 21	June 10	Oct. 1	Oct. 10	Oct. 15	Oct. 23	Dec. 24
1952	Mar. 11	Apr. 10	May 30	Sept. 20	Sept. 29	Oct. 4	Oct. 12	Dec. 13
1953	Mar. 1	Mar. 31	May 20	Sept. 10	Sept. 19	Sept. 24	Oct. 2	Dec. 2
1954	Mar. 19	Apr. 18	June 7	Sept. 28	Oct. 7	Oct. 12	Oct. 20	Dec. 20
1955	Mar. 8	Apr. 7	May 27	Sept. 17	Sept. 26	Oct. 1	Oct. 9	Dec. 10
1956	Feb. 26	Mar. 27	May 16	Sept. 6	Sept. 15	Sept. 20	Sept. 28	Nov. 29
1957	Mar. 17	Apr. 16	June 5	Sept. 26	Oct. 5	Oct. 10	Oct. 18	Dec. 18
1958	Mar. 6	Apr. 5	May 25	Sept. 15	Sept. 24	Sept. 29	Oct. 7	Dec. 7
1959	Mar. 24	Apr. 23	June 12	Oct. 3	Oct. 12	Oct. 17	Oct. 25	Dec. 26
1960	Mar. 13	Apr. 12	June 1	Sept. 22	Oct. 1	Oct. 6	Oct. 14	Dec. 14

Length of Jewish holidays (O = Orthodox, C = Conservative, R = Reform):

Passover: O & C, 8 days (holy days: first 2 and last 2); R, 7 days (holy days: first and last).

Shabuoth: O & C, 2 days; R, 1 day.

Rosh Hashana: O & C, 2 days; R, 1 day.

Yom Kippur: All groups, 1 day.

Sukkoth: All groups, 7 days (holy days: O & C, first 2; R, first only). O & C observe two additional days: Shemini

Atsereth (Eighth Day of the Feast) and Simhath Torah (Rejoicing of the Law). R observes Shemini Atsereth but not Simhath Torah.

Hanukkah: All groups, 8 days.

NOTE: All holidays begin at sundown on the evening before the date given.

CHRONOLOGY



GREAT HISTORICAL EVENTS

Compiled by

ENCYCLOPAEDIA BRITANNICA

Before the Christian Era—(B.C.)

- 5000-4000—Advanced stage of civilization in Egypt and Mesopotamia.
- 2000 (?)—Indo-Europeans invade northern Greece.
- 1700-1300—Rivalry between Assyria and Babylon for control of western Asia.
- 1300 (?)—Moses leads Jews out of Egypt.
- 1194-1184 (?)—Trojan War: Greeks emerge supreme after legendary siege of Troy.
- 753—Legendary founding of Rome by Romulus.
- 500-400—Rise of Maya civilization in Mexico.
- 499-479—Persian Wars: Persians, in expeditions against Greece, fail in efforts at subjugation.
- 431-404—Peloponnesian War: Spartans, under Lysander, take Athens to become supreme in Greece.
- 390—Barbarian Gauls sack Rome.
- 340—Rome assumes ascendancy over towns of Italy.
- 334-330—Alexander the Great conquers Greece, Persia, Egypt, and part of India.
- 264-146—Punic Wars: Romans, in campaigns against Carthaginians, seize Sicily and Spain and destroy Carthage (later rebuilt by Romans, destroyed by Arabs in 698 A.D.)
- 58-51—Caesar defeats Gauls and Germans.
- 45—Caesar becomes dictator for life.
- 44—Caesar assassinated; Mark Antony seizes Rome.
- 31—Octavius defeats Antony, conquers Egypt.
- 30—Suicides of Antony and Cleopatra.
- 27—Octavius becomes Emperor Augustus; Roman Empire established.
- 4 (?)—Birth of Christ (according to many historians).

The Christian Era—(A.D.)

- 29 (?)—Crucifixion of Christ.
- 78—Agricola conquers Britain.
- 247—Goths begin invasion of Europe.
- 306—Constantine the Great, first Christian Emperor, defeats the Franks.
- 330—Constantine makes Constantinople the seat of the Roman Empire.
- 400—Goths under Alaric invade Italy.
- 410—Sack of Rome by Alaric.
- 451—Battle of Châlons: Huns under Attila defeated by Romans.
- 476—Fall of Rome; traditional date dividing ancient and medieval history.
- 622—Hegira (flight of Mohammed from Mecca). After Mohammed's death in 632, Moslems sweep over much of western Asia and northern Africa.
- 711—Moslems cross into Spain.
- 732—Charles Martel defeats Moslems in Battle of Tours (or Poitiers).
- 800—Charlemagne crowned first emperor of Holy Roman Empire; Christianity established over much of Europe.
- 1066—Battle of Hastings: William the Conqueror successfully invades England.
- 1096-1291—The Crusades: European Christians, in seven periods of conflict, oppose the Moslems and Turks, developing commerce and extending Christianity.
- 1206—Mongolian Empire established by Genghis Khan.
- 1215—Magna Carta proclaimed.
- 1260-92—Kublai Khan establishes sovereignty in China.
- 1338-1453—Hundred Years' War: England loses lands in France.
- 1431—Joan of Arc burned at the stake.
- 1453—Turks capture Constantinople.
- 1455-85—Wars of the Roses: House of York against House of Lancaster; Richard III slain at Battle of Bosworth Field (1485); Tudor line started by Henry VII.

- 1492—Moors driven out of Spain. Christopher Columbus discovers America (West Indies).
- 1517—Beginning of Reformation in Germany.
- 1558-1603—Elizabeth is queen of England.
- 1571—Battle of Lepanto: Don John of Austria routs Turkish fleet.
- 1588—Spanish Armada destroyed by British.
- 1607—Jamestown, Va., settled by English under Capt. John Smith.
- 1618-48—Thirty Years' War: England, Holland, France, Sweden and German Protestants against Spain, Italy and German Catholics; Peace of Westphalia ends conflict, Alsace going to France, Swiss independence being recognized, and German secularized states being given religious freedom.
- 1619—First representative assembly in America at Jamestown, Va. First Negro slaves land at Jamestown from Dutch ship.
- 1620—Pilgrims land at Plymouth Rock.
- 1642-52—Great Rebellion: civil wars in England lasting from 1642 to 1646 and from 1648 to 1652; Charles I executed; Oliver Cromwell establishes commonwealth.
- 1644—Manchu Dynasty established in China, lasting until 1912.
- 1660—Monarchy restored in England under Charles II.
- 1665—The Great Plague in London.
- 1704—British capture Gibraltar from Spain.
- 1707—Scotland and England united.
- 1709—Battle of Poltava: Russians under Peter the Great defeat Swedes under Charles XII.
- 1756-63—Seven Years' War: France, Austria, Sweden, and Russia against England and Prussia; Clive defeats French at Battle of Plassey (1757), marking beginning of British supremacy in India; England wins Canada; Prussia retains Silesia. (American phase known as French and Indian War—1754-60).
- 1765—Stamp Act passed by British Parliament; Stamp Act Congress in New York threatens boycott unless repealed.
- 1770—The Boston Massacre (March 5).
- 1773—Boston Tea Party (Dec. 16).
- 1774—First Continental Congress, Philadelphia (Sept. 5).
- 1775-83—American Revolution. Outstanding events: 1775—Battle of Lexington-Concord (April 19). Battle of Bunker Hill (June 17). 1776—Declaration of American Independence (July 4). Battle of Long Island (Aug. 27). 1777—Congress adopts Stars and Stripes (June 14). Battle of Brandywine (Sept. 11). Battle of Germantown (Oct. 4). Burgoyne surrenders at Saratoga (Oct. 17). 1778—Battle of Monmouth (June 28). Capture of Kaskaskia (July 4). 1779—Battle of Savannah (Oct. 8-9). 1780—Major André hanged as spy (Oct. 2). Battle of Kings Mountain (Oct. 7). 1781—Battle of Cowpens (Jan. 17). Battle of Yorktown (Sept. 28-Oct. 19) and British surrender by Lord Cornwallis. 1783—Peace treaty signed by U. S. and Great Britain (Sept. 3).
- 1787—U. S. Constitution drawn up at Philadelphia (May 14).
- 1789—First U. S. Congress meets in New York City (Mar. 4); first session begins (April 6). Washington elected first President (April 6) and is inaugurated (April 30).
- 1789-99—French Revolution. Outstanding events: 1789—Bastille destroyed (July 14). 1792—War with Prussia. France declared republic (Sept. 21). 1793—Louis XVI and Queen Marie Antoinette beheaded. Beginning of Reign of Terror. 1795—Napoleon Bonaparte heads army. Peace with Prussia. Directory established (Oct. 27). (Revolution merges into Napoleonic Wars.)
- 1792—Trial of Warren Hastings, British administrator in India.
- 1796-1815—Napoleonic Wars. Outstanding events: 1796—War in Italy. 1798—Campaign in Egypt. 1799—Napoleon made first Consul of French republic. 1804—Napoleon crowned emperor (Dec. 2). 1805—Nelson defeats French in Battle of Trafalgar (Oct. 21). French defeat Russians and Austrians in Battle of Austerlitz (Dec. 2). 1812—French defeat Russians in Battle of Borodino (Sept. 7). 1813—French defeated in Battle of Leipzig (Oct. 16-19). 1814—Napoleon abdicates (April 11), sent to Elba. Louis XVIII becomes King of France. First Treaty of Paris (May 30). 1815—Napoleon flees Elba (Feb. 26). Conclusion of Congress of Vienna (June 9). Napoleon defeated in Battle of Waterloo (June 18). Second Treaty of Paris (Nov. 20).
- 1800—Britain and Ireland united.
- 1803—Louisiana Purchase.
- 1804-06—Journey of Lewis and Clark overland to U. S. Northwest.
- 1812-14—War of 1812. Outstanding events: 1812—Declaration of War by U. S.

- (June 18). Fort Dearborn (Chicago) Massacre by Indian allies of British (Aug. 15). Detroit surrenders to British (Aug. 15). 1814—British burn White House at Washington. Battle of Plattsburgh won by Americans (Sept. 11). U. S. signs treaty with Britain at Ghent, Belgium (Dec. 24). 1815—Battle of New Orleans (Jan. 8). (Slowness of communications was responsible for continuation of hostilities after treaty.)
- 1815—Holy Alliance formed (Sept. 26) by Russia, Austria and Prussia; intended to regulate government according to Christianity but was used for repressing political liberty.
- 1819—Florida purchased from Spain.
- 1820—Missouri Compromise permits slavery in that state.
- 1823—Monroe Doctrine proclaims that no European power may seize territory or set up a government on American continents.
- 1830—Revolt in France; Charles X flees; Louis Philippe becomes king.
- 1832—South Carolina nullifies U. S. protective tariff law.
- 1836—Battle of the Alamo (March 6): Texas declares its independence from Mexico.
- 1846-48—Mexican War: boundary dispute between U. S. and Mexico; by Treaty of Guadalupe Hidalgo (1848), Mexico cedes Calif., Nev., and Utah to U. S.; Texas boundary set at Rio Grande.
- 1848—French depose Louis Philippe, set up Second Republic under Louis Napoleon. ¶ *Communist Manifesto* issued by Marx and Engels.
- 1852—Louis Napoleon sets up second empire and takes title of Napoleon III.
- 1853-56—Crimean War: Russia loses claim to Greek Christians under Turkish flag.
- 1857—Dred Scott decision of U. S. Supreme Court (March 6) holds that a Negro slave is not a citizen.
- 1858—Lincoln-Douglas debates in Illinois.
- 1859—John Brown's raid on Harpers Ferry (Oct. 16).
- 1860—South Carolina secedes (Dec. 20).
- 1861—Seceding states proclaim Confederacy; Jefferson Davis named president (Feb. 9). ¶ First Italian parliament (Feb. 18); Victor Emmanuel II made king. ¶ Serfdom abolished in Russia.
- 1861-65—American Civil War. Outstanding events: 1861—Battle of Bull Run (July 21). 1862—Battle of Monitor and Merrimac (March 9). Battle of Shiloh (April 6-7). Seven Days battle (June 26-July 2). Battle of Antietam Creek (Sept. 16-17). 1863—Lincoln's Emancipation Proclamation (Jan. 1). Battle of Chancellorsville (May 2-4). Battle of Gettysburg (July 1-3). Grant captures Vicksburg (July 4). Battle of Chickamauga (Sept. 19-20). Battle of Lookout Mountain (Nov. 24-25). 1864—Battle of Wilderness (May 5-6). Battle of Spotsylvania (May). Sherman's march through Georgia (ended Dec. 20). 1865—Lee surrenders at Appomattox (April 9).
- 1864—International Working Men's Association (First International) founded in London.
- 1865—Lincoln shot by John Wilkes Booth (April 14, dies April 15).
- 1867—Alaska bought from Russia by U. S.
- 1869—Central Pacific and Union Pacific rail lines joined near Ogden, Utah (May 10), completing first transcontinental railroad.
- 1870-71—Franco-Prussian War: ends with Treaty of Frankfurt (May 10, 1871).
- 1873—Financial panic in New York.
- 1876—Battle of the Little Big Horn in Montana: massacre of General Custer's forces by the Sioux (June 25).
- 1877-78—Russo-Turkish War: power of Turkey in Europe broken; redivision of southeastern Europe at Congress of Berlin (June 13-July 13, 1878).
- 1881—Alexander II of Russia assassinated by nihilists (March 13). ¶ President Garfield fatally shot (July 2, dies Sept. 19).
- 1883—Pendleton Act establishes Civil Service Commission and merit system.
- 1889—Second International formed in Paris.
- 1894-95—Chinese-Japanese War: Japan wins Formosa.
- 1898—Spanish-American War. Outstanding events: U. S. battleship *Maine* blown up in Havana harbor (Feb. 15). Dewey destroys Spanish fleet at Manila (May 1). Charge of San Juan Hill (July 1). Cervera's fleet destroyed off Santiago, Cuba, by U. S. ships (July 3). Treaty of Paris signed (Dec. 10) with Spain ceding the Philippines and Puerto Rico.
- 1899-1902—Boer (South African) War: resistance of Dutch to British government in Transvaal; Boers defeated and sign peace treaty at Pretoria (May 31, 1902).
- 1899—Filipinos revolt (Feb. 4); U. S. forces capture rebel leader, Aguinaldo (March 23, 1901).
- 1900—Boxer uprising in China against foreigners and Chinese Christians; foreign legations at Peking besieged.

- 1901—President McKinley fatally shot (Sept. 6, dies Sept. 14).
- 1904-05—Russo-Japanese War: result of conflicts in Manchuria; Port Arthur surrenders to Japanese (Jan. 2, 1905); Treaty of Portsmouth (Sept. 5, 1905).
- 1912—China becomes republic (Feb. 12).
- 1912-13—Balkan Wars: Bulgaria, Serbia, Greece, and Montenegro allied successfully against Turkey; later Bulgaria attacks Serbia and Greece and is defeated.
- 1914—U. S. troops land at Veracruz, Mexico, and occupy city for several months. ¶Archduke Francis Ferdinand of Austria assassinated (June 28) at Sarajevo by Serbs, precipitating World War I.
- 1914-18—World War I: Central Powers (Austria-Hungary, Germany, Bulgaria and Turkey) against the Allies (United States, Great Britain, France, Russia, Belgium, Serbia, Greece, Rumania, Montenegro, Portugal, Italy and Japan). Outstanding events: 1914—Austria declares war on Serbia (July 28). Germany declares war on Russia (Aug. 1) and France (Aug. 3). Germans invade Belgium (Aug. 4). Britain declares war on Germany (Aug. 4). Germans defeat Russians at Tannenberg, East Prussia (Aug. 31). First Battle of the Marne (Sept. 6-9). 1915—German U-boat blockade of Great Britain begins. Dardanelles campaign against Turkey fails. 1916—Battle of Jutland (May 31). Battles of the Somme (July-Nov.). Germans turned back at Verdun (Sept. 3). Rumania overrun by Central Powers; fall of Bucharest (Dec. 6). 1917—Germany begins unrestricted submarine warfare. U. S. declares war (April 6). First U. S. troops in France (June 26). British capture Jerusalem (Dec. 9). Battle of Caporetto ends (Dec. 19). 1918—President Wilson's Fourteen Points of Peace speech (Jan. 8). Battle of the Somme (March 21-April 6). Battle of the Aisne (May 27-June 5). Second Battle of the Marne (July 15-Aug. 4). U. S. troops take St. Mihiel (Sept. 13). Battle of the Meuse-Argonne (Sept. 20-Nov. 11). Allies break Hindenburg line (Oct. 5). Armistice signed (Nov. 11).
- 1917—First phase of Russian Revolution (Mar.): Tsar abdicates (Mar. 15) and is imprisoned; second phase of Revolution (Nov. 7): provisional government of Kerensky is overthrown. ¶Balfour declaration (Nov. 2) on Jewish homeland in Palestine.
- 1918—Tsar Nicholas II and his family shot by Bolsheviks (July 16).
- 1919—The Third International (organization of Communist parties of all nations) founded at Moscow (March). ¶Treaty of Versailles signed (June 28); U. S. Senate refuses to ratify treaty (Nov. 19).
- 1920—League of Nations comes into existence (Jan. 10). ¶Prohibition begins (Jan. 20). ¶Woman suffrage amendment ratified (Aug. 26).
- 1921—Resolution declaring peace with Germany and Austria signed by Harding (July 2). ¶Conference for limitation of armaments meets in Washington, D. C. (Nov. 12).
- 1922—Irish Free State established (Jan. 15). ¶Treaty for limitation of naval armaments concluded at Washington by U. S., Britain, France, Italy and Japan (Feb. 6). ¶First session of World Court (June 15). ¶Fascist coup in Italy; Mussolini forms cabinet (Oct. 31).
- 1923—French begin occupation of Ruhr (to 1925). ¶World Court Protocol rejected by U. S. Senate (Mar. 3). ¶Munich beer hall putsch led by Hitler put down (Nov. 8-9).
- 1924—Teapot Dome oil scandals. ¶Death of Lenin (Jan. 21). ¶Dawes Plan presented (April 9) to stabilize German currency and regulate annual payments of reparations.
- 1925—Bryan and Darrow in Scopes evolution trial in Tennessee (July). ¶Locarno Conference held (Oct.) to insure peace, preserve boundaries.
- 1926—World Court membership approved by U. S. (Jan. 27) with reservations; reservations rejected by Court. ¶General strike in Britain (Apr.-Dec.).
- 1927—Record floods in Mississippi, tributary valleys (Apr.-May). ¶Lindbergh flies solo across Atlantic (May 20-21). ¶Sacco, Vanzetti executed (Aug. 23).
- 1928—Kellogg Peace Pact signed (Aug. 27); 15 nations outlaw war. ¶First Five-Year Plan begun in U.S.S.R. (Oct. 1).
- 1929—Lateran Treaty signed (Feb. 11), establishing Vatican City State. ¶Young Plan completed (June 7) for payment of German reparations. ¶New York stock market collapses (Oct. 29); depression begins.
- 1930—Navy pact signed by U. S., Britain, Japan, France and Italy (April 22). ¶Hawley-Smoot Tariff signed by Hoover (June 17).
- 1931—Alfonso XIII of Spain abdicates (Apr. 14). ¶Hoover proposes 1-year war-debt moratorium (June 6). ¶Japan seizes Mukden, Manchuria (Sept. 19).
- 1932—Japanese invade Shanghai (Jan. 29). ¶Bonus Army marches on Washington, D. C. (June-July). ¶House votes 3.2 beer (Dec. 21).

HEADLINES OF THE YEARS, 1933-1949



- 1933** Roosevelt was in, Hoover out. Roosevelt was fitting Cabinet pieces together, making plans. Hoover was packing his papers. In the long pause from November to March, the rolls of jobless mounted and the nation grew more jittery. From Germany, increasingly turbulent and truculent, the name Adolf Hitler came more and more into the news. It was the year of the NRA and the Blue Eagle and the year Prohibition ended. "The only thing we have to fear is fear itself," said Roosevelt in his inaugural speech.
- Jan. 30** Hitler made Chancellor of Germany by Hindenburg.
- Feb. 9** League of Nations demands Japan surrender conquests in China.
- 14** Gov. Comstock of Michigan proclaims bank holiday; \$50,000,000 rushed to Detroit.
- 15** F.D.R. escapes death as assassin's bullet fells Mayor Cermak, 59, of Chicago at Miami (dies Mar. 6). Police seize Giuseppe Zangara, fanatic.
- 27** Reichstag building set afire; Nazis blame Communists.
- Mar. 4** Capital of Jehol in north China falls to Japanese.
- Roosevelt inaugurated; promises wartime action to defeat Depression.
- 5** Roosevelt proclaims bank holiday; bans hoarding; embargoes gold.
- 12** President Roosevelt broadcasts first "Fireside Chat."
- 14** Congress votes 3.2 beer.
- 15** Exchanges reopen; stocks up.
- 21** Roosevelt offers plan for 250,000 Civilian Conservation Corps jobs.
- 23** Reichstag confers blanket powers on Hitler for 4 years.
- 28** Nazis boycott Jews; order labels on all Jewish stores.
- April 19** U. S. goes off gold standard.
- May 15** U. S. refuses to join Britain and France for three-power action against Hitler.
- 27** Century of Progress Exposition at Chicago opens.
- June 7** Italy, Britain, France, and Germany sign 4-power pact at Rome for ten-year peace.
- 16** Roosevelt signs NRA bill, opens recovery drive; 5,000,000 jobs his goal.
- 29** London Monetary and Economic Conference begs Roosevelt for stabilization agreement; warns of collapse, currency war.
- July 12** Blanket industrial code sets wages at minimum of 40 cents an hour.
- 20** Stocks break 5 to 20 points; worst break in 3 years.
- 22** Wiley Post completes solo globe circuit in 7 days, 18 hours, 45 minutes.
- Aug. 5** U. S. strike truce signed by industry and labor.
- 7** Reich scorns Anglo-French notice to stay out of Austria.
- Sept. 13** 200,000 New Yorkers participate in 10-hour parade up Fifth Avenue for NRA.
- Oct. 14** Hitler bolts League of Nations and arms parley at Geneva.
- 17** Dr. Albert Einstein, refugee from Germany, arrives in United States, settles in Princeton, N. J.
- 25** Newly mined gold price set at \$31.36 per oz., 27 cents above world market price.
- Nov. 7** F. H. LaGuardia elected New York Mayor.
- 12** Hitler wins 93.4 per cent vote in referendum on Nazi foreign policy.
- 17** U. S. and Russia resume full relations (as of 11:50 P.M., Nov. 16); Soviet gives list of guarantees including pledge "to refrain from propaganda against the policies or social order of the U. S."
- Dec. 5** Prohibition ends in U. S. as Utah, 36th state, ratifies Repeal at 5:32 P.M.
- DIED:** Calvin Coolidge, 60, Jan. 5; Sara Teasdale, 48, Jan. 29; John Galsworthy, 66, Jan. 31; James J. Corbett, 66, Feb. 18; Earl Derr Biggers, 48, Apr. 5; Fatty Arbuckle, 46, June 29; Ring Lardner, 48, Sept. 25; E. H. Sothern, 73, Oct. 28; Texas Guinan, 49, Nov. 5; Knud Rasmussen, 54, Dec. 21.

1934 The New Deal delved into the alphabet and came up with multi-lettered agencies. Mr. Roosevelt's resonant voice roused and reassured the nation in fireside chats. The Blue Eagle flapped. People talked about Section 7-A, codes, NRA, CCC, farm relief, cracking down on chiselers, and boondoggling. The little guy (it seemed) was coming into his own at last. Prohibition was finished. The nation enjoyed its first legal alcoholic holiday in fifteen years. New York had double cause to celebrate: Tammany was out in the cold for the first time since 1918.

Jan. 4 Roosevelt notifies Congress recovery program will cost \$10,000,-000,000 by June 30, 1935.

10 Van der Lubbe, Dutch communist, beheaded for Reichstag fire.

11 6 Navy planes reach Hawaii from California in 24¾ hours.

31 Dollar cut to 59.06 cents (gold value).

Feb. 6 20 dead in Paris riots; Daladier's government resigns next day.

12 France paralyzed by general strike. Civil war in Austria, over 500 dead.

17 Britain, France, Italy send note to Hitler backing Dollfuss government in Austria.

19 Nazis send ultimatum to Dollfuss.

Mar. 1 Henry Pu-yi becomes Emperor Kang Teh of Manchukuo. (Manchukuo was Japan's new name for Manchuria.)

10 Roosevelt orders curtailment of Army air mail after ten Army casualties in 20 days.

15 Samuel Insull, reportedly disguised as woman, flees Athens to evade extradition to U. S.

24 Roosevelt signs Philippine Independence Bill.

28 Roosevelt gets first setback in Congress as his veto of independent offices appropriation bill is overridden.

April 13 4,700,000 U. S. families on relief, Hopkins reports.

30 U. S. rejects Japanese claim of hegemony in China.

May 10 Severe drought in Midwest is followed by dust storms.

28 Quintuplets born to Mrs. Oliva Dionne, at Corbell, Ont.

June 14 Germany declares six-months moratorium on all foreign debts.

29 Gov. William Langer, North Dakota, sentenced to eighteen months in prison for conspiracy to defraud U. S. government.

30 Hitler "purge" kills Ernst Roehm and score of other Nazi leaders.

July 15 Famine threatens San Francisco in general strike; all unions go out in sympathy with longshoremen and marine workers.

19 San Francisco strike settled.

24 Heat, drought blanket Midwest "dustbowl"; at least 700 dead.

25 Engelbert Dollfuss, 42, Austrian Chancellor, assassinated.

Aug. 2 Hindenburg, 86, dies; Hitler becomes absolute dictator of Germany.

9 U. S. nationalizes silver, to pay 50.01 cents an ounce.

26 Hitler asks return of Saar, peace with France.

31 Huey Long enters New Orleans with troops; plans to investigate political enemies.

Sept. 5 337,000 out in nationwide textile strikes.

8 About 130 die, many missing as liner *Morro Castle* burns off N. J.

20 Bruno Richard Hauptmann arrested for Lindbergh kidnap-slaying.

25 Gen. Hugh Johnson resigns as NRA administrator.

Oct. 6 Catalonia secedes in Spain; Reds riot, civil war threatens.

9 Alexander I of Yugoslavia, 45, and French Foreign Minister Barthou assassinated at Marseilles by Croatian.

Nov. 4 Charles Kingsford-Smith files first eastward Pacific flight from Honolulu to California in 14 hours, 59 minutes.

6 Democrats gain Congress strength in New Deal election victories.

21 Japan asks naval parity; warns of intention to terminate 1922 Washington agreement.

Dec. 3 France and Germany sign Saar Treaty at Rome.

5 Russia "purges" [executes] 66 for plotting against Stalin regime.

19 Japanese Privy Council votes to abrogate Washington Naval Treaty of 1922.

26 Ethiopia protests to League of Nations against Italian oil seizures.

29 Japan formally denounces 1922 naval treaty.

DIED: Albert I of Belgium, 58, Feb. 17; Sir Edward Elgar, 76, Feb. 23; John J. McGraw, 60, Feb. 25; Frederick Dellus, 71, June 10; Mme. Marie Curie, 68, July 4; Marie Dressler, 64, July 28.

1935 In Europe the dictators grew more arrogant. Mussolini cried aloud his dreams of Roman grandeur from the Quirinal balcony. In far-off Ethiopia dark warriors primed muskets and sharpened spears. Hitler eyed Austria and the Ruhr.

But why worry? America was climbing out of the Depression, we hoped; business was stirring and money was channeled through relief rolls to the distressed and the hungry. Except for outraged cries from the Liberty League, the New Deal forged ahead.

Jan. 2 Bruno Richard Hauptmann goes on trial at Flemington, N. J., for kidnap-slaying of the Lindbergh baby.

4 Roosevelt asks 3,500,000 jobs (PWA) to end dole.

7 Oil control provision of NIRA unconstitutional, Supreme Court decides in first New Deal test.

13 Saar plebiscite 90 per cent for reunion with Germany.

24 Liner *Mohawk* sinks after collision off N. J. coast.

29 Senate rejects World Court.

Feb. 10 Rome reports 12-day clash between Italian and Ethiopian troops.

13 Hauptmann guilty.

Mar. 1 Saar is returned to Germany.

6 22,000,000 on U. S. relief rolls.

16 Hitler scraps Versailles Treaty by re-establishing universal military training in Germany.

27 Hitler demands union with Austria, part of Czechoslovakia; wants air force and navy.

April 1 Scottsboro boys win new trial.

14 Britain, France, Italy criticize Reich for treaty violation.

May 12 Marshal Pilsudski, 67, Polish dictator, dies.

18 Largest land plane crashes after collision over Moscow; 49 killed.

24 9-year-old George Weyerhauser of wealthy lumber family kidnaped at Tacoma, Wash.

27 Supreme Court unanimously voids NRA.

June 1 Weyerhauser returned after payment of \$200,000 ransom.

3 SS *Normandie* on maiden voyage, crosses Atlantic in 4 days, 11 hr., 42 min.; new record.

7 Pierre Laval again becomes Premier of France.

J. Ramsay MacDonald, Labour Prime Minister, resigns; Stanley Baldwin heads new Conservative government in Britain.

10 China yields to Japan in north, surrenders rule over Peiping, Tientsin.

14 Roosevelt signs stop-gap NRA.

19 Anglo-German naval pact gives U-boat parity.

Senate passes Wagner Labor Relations Act, Social Security Act.

July 5 Roosevelt signs Wagner Act.

17 More than 80,000 Jews have quit Germany.

Aug. 15 Will Rogers, 55, and Wiley Post, 36, killed in plane crash in Alaska.

21 Senate votes for neutrality, ban on arms sale to belligerents in Ethiopia crisis.

29 Queen Astrid, 30, of Belgium is killed in auto crash.

Haile Selassie cedes oil rights in half of Ethiopia to American and British interests in an effort to stop Italy.

Sept. 2 Hurricane strikes Florida Keys, reaches mainland next day; several hundred dead.

3 U. S. State Department forces oil promoters to cancel Ethiopia concession.

8 Huey Long, 42, shot at Louisiana capitol; his assailant killed by guards. Long dies September 10.

15 Jews deprived of citizenship by Nazis; ghettos revived; swastika becomes national flag.

17 Manuel Quezon elected first president of Philippines.

21 Mussolini rejects League's peace plan for Ethiopia.

Oct. 2 Ethiopia invaded.

3 Italians bomb Adowa; 1,700 reported dead.

23 Dutch Schultz shot by gangsters in Newark, N. J., cafe; dies next day.

Nov. 3 King George II recalled to Greek throne in plebiscite.

11 Army pilots climb 74,000 ft. (14 mi.) in stratosphere flight.

22 First air mail flight across Pacific to Manila.

27 Japanese strike at Peiping.

Dec. 9 Supreme Court denies Hauptmann appeal; he must die Jan. 13.

14 Thomas G. Masaryk resigns as President of Czechoslovakia.

22 Anthony Eden becomes England's Foreign Secretary; urges sanctions against Italy.

DIED: Edwin Arlington Robinson, 65, Apr. 6; Adolph S. Ochs, 77, Apr. 8; Oliver Wendell Holmes, 93, Mar. 6; T. E. Lawrence (of Arabia), 46, May 19; Jane Addams, 74, May 21; Alfred Dreyfus, 75, July 12; Billy Sunday, 71, Nov. 6.

1936 The fuse was lit in Ethiopia and North China. As war rumbled along those far-off horizons, the U. S. sidled behind a "Neutrality Act" and fought shy of foreign entanglements. This time, we said, we will have no truck with foreign wars. As for domestic conflict, John L. Lewis had just punched Bill Hutcheson in the nose and the boys were choosing up sides for Labor's great civil war between the AFL and CIO. It was, in fact, an exciting time for Labor, what with the generous new Wagner Act and the introduction of the sit-down strike. The New Deal was in the saddle, F.D.R. had signed the Social Security Act and another national election was coming up.

Jan. 3 President Roosevelt backs drastic neutrality law, hits "autocrats" of world.

6 AAA crop control program declared unconstitutional by the Supreme Court.

15 Japanese withdraw from naval conference at London.

20 King George V, of England, dies at 70; Prince of Wales, 41, succeeds to the throne as Edward VIII.

Feb. 17 TVA wins first test of constitutionality as Supreme Court rules Wilson Dam can sell power.

26 Army seizes power in Japan; Tokyo under martial law.

Mar. 1 10,000 Ethiopians slain, two armies routed.

7 Hitler sends German troops into the Rhineland, defying Treaty of Versailles; scraps Locarno Pact.

8 Italians halt war in Ethiopia pending peace talks recommended by League.

10 France and Belgium insist on military sanctions against Germany.

29 Hitler receives 98.79 per cent vote in German elections.

31 Japanese troops invade Mongolia; Russians angry.

April 3 Bruno Richard Hauptmann electrocuted in Trenton, New Jersey.

7 Great Britain gives League evidence Italy is using poison gas in Ethiopia.

May 5 Italian army occupies Addis Ababa; war is over.

9 Dirigible *Hindenburg* docks in Lakehurst, N. J., 61½ hr. after take-off from Friedrichshafen, Ger.

18 Guffey Coal Act found constitutional by Supreme Court.

June 4 500,000 strikers are out as Léon Blum's Socialist government, France's first, takes office.

11 Alf M. Landon, of Kansas, nominated for President by Republican Convention at Cleveland.

27 Franklin D. Roosevelt is renominated for President.

July 1 Britain, France refuse to recognize Italian conquest of Ethiopia but will not go to war.

19 Gen. Franco and rebel force land in Spain from North Africa.

Aug. 5 Premier General John Metaxas declares dictatorship in Greece under King George II.

12 Germany agrees to non-intervention in Spain.

Sept. 25 France announces franc will be devalued in accord with the United States and Great Britain.

Oct. 3 France slashes its tariffs from 15 to 20 per cent in bid for world trade.

14 Belgium renounces French alliance, will look to own resources for national safety.

24 Germany, Italy agree to Fascist front against Europe.

Nov. 3 President Roosevelt, Governor Herbert H. Lehman, of New York, win election in sweeping Democratic victories.

18 Italy and Germany recognize Franco's regime in Spain.

25 Japan signs anti-Comintern treaty with Germany.

Dec. 11 Edward VIII abdicates.

12 George VI proclaimed King; Edward, as Duke of Windsor, leaves England.

15 Twenty-one American republics sign neutrality pact.

25 Generalissimo Chiang Kai-shek, dictator of China, is released thirteen days after being kidnaped by forces of Marshal Chang, former war lord, in mutiny.

DIED: John Gilbert, 38, Jan. 9; Rudyard Kipling, 70, Jan. 18; Charles Curtis, 78, Feb. 8; Antonio Scotti, 70, Feb. 26; Ivan P. Pavlov, 86, Feb. 27; Marilyn Miller, 37, Apr. 7; Ottorino Respighi, 56, Apr. 18; Oswald Spengler, 51, May 8; G. K. Chesterton, 62, June 14; Maxim Gorki, 68, June 18; Lincoln Steffens, 70, Aug. 9; Ernestine Schumann-Heink, 75, Nov. 17; Luigi Pirandello, 69, Dec. 10; Arthur Brisbane, 72, Dec. 25.

1937 Now Spain was a battleground of weapons and clashing ideas. The Dictators had become a blustering team and there was no one to call their bluff. In Moscow the Kremlin produced a fantastic purge of traitors and weaklings and confused Bolsheviks.

In the U. S. Franklin Roosevelt was about to begin his second term after brushing off the Landon challenge. The Republican party's representation in Congress had dwindled to a handful. A confident F.D.R. was about to launch his scheme against the "Nine Old Men" on the U. S. Supreme Court.

Jan. 2 Britain signs Mediterranean Accord with Italy in effort to split Duce from Hitler.

4 10,000 Italian troops land in Spain.

19 Howard Hughes crosses U. S. in 7 hr., 28 min., 25 sec.

20 Roosevelt takes oath for 2nd term; pledges end to poverty.

23 17 Moscow defendants confess they helped Trotsky plan to undermine Soviet.

30 Hitler scraps Versailles war guilt clause.

Feb. 2 Sit-down strikers at Flint, Mich., defy Court order to evacuate.

5 Roosevelt asks power to enlarge Supreme Court to 15 Justices; new appointments would offset elderly members who refuse to retire.

23 1,400 Ethiopians executed for attack on Gen. Rodolfo Graziani.

Mar. 1 Steel plants raise wages to \$5 per day; grant 40-hour week.

18 413 pupils, 14 teachers die in New London, Tex., school explosion.

22 Hughes, Brandeis, Van Devanter oppose extra Justices as impairing Court's efficiency.

29 Supreme Court backs Washington State Minimum Pay Act for Women.

April 12 Supreme Court upholds Wagner Act.

30 Franco battleship sunk by Loyalist plane, about 700 drown.

May 3-5 Italy and Germany agree to help Franco fight on, and attack Madrid anew.

6 Hindenburg explodes at Lakehurst; 36 die as world's largest dirigible falls in flames.

12 George VI crowned in London.

18 Senate committee rejects Roosevelt Court plan, 10-8; Van Devanter, 78, resigns.

24 Social Security upheld by Supreme Court.

25 AFL declares war on CIO.

26 Steelworkers strike; 75,000 out.

28 Neville Chamberlain becomes Prime Minister of Britain, succeeding Baldwin.

June 3 Duke of Windsor, former Edward VIII, weds Wallis Warfield Simpson.

22 Joe Louis wins heavyweight title, knocking out James J. Braddock.

July 2 Amelia Earhart Putnam, 38, missing in Pacific in round-the-world flight; Navy ships and planes in search.

22 Senate defeats Court plan, burying it in committee by 70 to 20; overrides Farm Loan Act veto.

24 Alabama frees 5 of 9 Scottsboro defendants.

29 Tientsin set afire by Jap planes.

Aug. 1 Japs thrust south toward Nanking, after quelling North, to widen "incident war"; Central China in panic.

12 Senator Hugo Black named to Supreme Court.

15 863 die as Chinese planes accidentally bomb Shanghai.

17 Black confirmed; Senate rejects rumors of Senator's Klan affiliations.

23 Japs land at Shanghai; 173 killed as shell explodes in international quarter.

Nov. 29 Britain and France agree to give Hitler colonies in exchange for peace.

Dec. 10 Japanese attack, sack Nanking.

11 Italy quits League over Ethiopia.

12 U. S. gunboat *Panay* sunk by Jap planes.

14 Tokyo apologizes for *Panay*, ousts air chief two days later.

19 Russia executes 8 more officials for treason.

20 Erich von Ludendorff, last German war lord, dies.

21 Roosevelt bars "Isolation"; doesn't want "peace at any price."

25 U. S. accepts Tokyo apology on *Panay*.

DIED: Elihu Root, 91, Feb. 7; John D. Rockefeller, 97, May 23; Jean Harlow, 26, June 7; George Gershwin, 38, July 11; Guglielmo Marconi, 63, July 20; Andrew W. Mellon, 82, Aug. 28; Thomas G. Masaryk, 87, Sept. 14; James Ramsay MacDonald, 71, Nov. 9; Maurice Ravel, 82, Dec. 28.

1938 The stock market sagged and slumped, industry was again in the doldrums. Roosevelt blamed a business recession. "Pump priming" was the word in Washington, where they talked of fresh billions to get things moving again.

The President was working on a plan for an enlarged Navy. The program sounded logical, for in Europe the machinery of war gathered momentum ominously, while the democratic nations fumed and hesitated. Hitler's troops were poised for Austria; the stage was set for Munich.

Jan. 19 Franco air raids kill 700 in Barcelona and Valencia.

28 Roosevelt asks billion dollars for "two-ocean Navy."

Feb. 4 Hitler announces seizure of army control; Ribbentrop becomes Foreign Minister.

16 Austria, yielding to Hitler's threat, puts Nazis in cabinet.

20 Hitler defies foes, says Nazis will protect Germans everywhere. Anthony Eden resigns as British Foreign Minister, charging Chamberlain seeks to "buy peace."

22 Commons approves Chamberlain policy.

Mar. 4 Rev. Martin Niemöller imprisoned by Nazis.

12 Hitler strikes in Austria; Nazis seize government as army moves in; Schuschnigg ousted.

18 Mexico expropriates foreign oil interests.

29 U. S. protests Mexican oil seizures.

April 4 Loyalist Spain severed as Rebels cut sea road.

10 Austrians vote 99.75 per cent for *Anschluss*.

16 Britain and Italy sign pact to maintain peace.

May 3 Hitler in Rome, pledges amity with Duce.

9 League yields, allowing France and Britain to recognize Italy's conquest in Ethiopia, which is proclaimed 3 days later.

June 15 Wage-Hour Bill enacted.

20 France closes frontier at behest of Britain, halting aid to Spanish Loyalists.

23 Germany puts entire nation under temporary forced-labor system.

July 4 50,000 jailed in Austria during 3½ months of Nazi terror.

9 14 Jews, 44 Arabs dead in 5-day Palestine riots.

14 Howard Hughes completes flight around world: 3 days, 19 hr., 14 min., 10 sec. (record).

18 Douglas Corrigan lands in Dublin in "wrong-way" flight.

31 Japanese and Russians in border skirmish.

Aug. 3 Mexico rejects U. S. protest, cites U. S. New Deal to justify oil seizures.

11 Russian-Japanese truce effected.

Sept. 1 Hitler demands autonomy for Sudeten Germans.

5 Prague yields to Nazi pressure on nearly all German demands.

10 Hitler, Goering defiantly promise protection to Sudeten Germans.

19 Britain and France, after parley, urge Czechs to surrender Sudetenland.

25 Roosevelt appeals to Hitler and Czechs for peaceful settlement of problems.

30 Britain, France, Italy, Germany in parley at Munich agree to dismemberment of Czechoslovakia. Chamberlain returns to London with "peace in our time."

Oct. 1 Nazi troops cross Czech border; Czechs yield to Polish demand for Teschen.

3 Hitler makes triumphant entry in Sudetenland, and—

5 forces Britain and France to yield more Czech territory in Bohemia.

30 "Attack from Mars" in radio sketch by Orson Welles causes widespread panic.

Nov. 2 Hungary gets slice of Czechoslovakia, too.

10 Assassination of German envoy in Paris by Herschel Grynszpan looses Nazi wrath at Jews over all Reich; Jews herded into camps; fined \$400,000,000 three days later.

Mexico agrees to pay for oil and land seizures.

13 Mother Cabrini first American to be beatified in Vatican.

18 Hitler recalls German Ambassador from U. S. in protest against American anti-Nazi attitude.

23 Jews in Germany fined 20 per cent of all property.

Dec. 6 French, German peace pact signed.

DIED: Clarence Darrow, 80, Mar. 13; Fyodor Chaliapin, 65, Apr. 12; Benjamin Cardozo, 68, July 9; Samuel Insull, 78, July 16; Queen Marie of Rumania, 62, July 18; Warner Oland, 57, Aug. 6; Patrick Cardinal Hayes, 70, Sept. 4; Thomas Wolfe, 37, Sept. 15; Alma Gluck, 54, Oct. 27; Kemal Ataturk, 57, Nov. 10.

1939 After Munich (Sept. 30, 1938) a murky twilight settled over the world—a time of uneasiness and fear. Britain armed feverishly, the U. S. stepped up plane production. The cause of the Spanish Loyalists disintegrated. Bundists, American Firsters and Communists grew hoarse denouncing warmongers. Congress stood firm for neutrality.

New York was excited about a World's Fair—the World of Tomorrow. While the assorted glamour and gadgets of this bright glimpse of the future were assembling on Flushing Meadow, a very different world was being shaped by forces unleashed in Europe. It was not the World of Tomorrow we expected. In its vast changes, economic and political upheavals, its waste and tumult and pain, it was to surpass the most extravagant forecasts.

Jan. 4 President Roosevelt calls for extensive defense program.

5 Felix Frankfurter named to Supreme Court.

7 Tom Mooney pardoned.

20 Hitler removes Hjalmar H. G. Schacht; appoints Walther Funk to head Reichsbank.

24 30,000 dead in Chilean earthquake; cities wrecked, destruction in 6 provinces.

26 Barcelona yields; Loyalists flee to North.

30 Hitler pledges aid to Italy in war, calls for colonies, foreign trade, and denounces "defamation in U. S."

Feb. 10 Pope Pius XI dies at 81 after seventeen years' reign.

13 Justice Louis D. Brandeis retires at 82.

18 Golden Gate International Exposition opens in San Francisco.

27 Franco officially recognized by France and England. Sit-down strikes outlawed by Supreme Court.

Mar. 2 Cardinal Pacelli elected Pope, becomes Pius XII.

7 UAW secedes from CIO.

12 Pius XII crowned Pope.

14 Slovakia, Ruthenia declare independence; Germany enters Bohemia-Moravia; Hungary enters Ruthenia.

15 Hitler and troops enter Prague.

16 Bohemia-Moravia becomes German protectorate; Hitler assumes protection of Slovakia; Hungary annexes Ruthenia.

20 William O. Douglas named to Supreme Court.

22 Lithuania cedes Memel to Germany.

28 Madrid surrenders to Franco.

29 Spanish civil war ends as last 9 of 52 provincial capitals surrender.

31 Britain, France pledge aid if Poland resists a Nazi attack.

April 1 U. S. accords Franco full recognition.

7 Thomas J. Pendergast indicted by U. S. on income tax evasion. Italian troops invade Albania.

14 President Roosevelt vows to defend the United States' neighbors with arms and finances.

27 House of Commons approves conscription in Great Britain.

28 Hitler scraps war renunciation treaty with Poland and naval limitations pact with England. Demands Danzig, and rebuffs Roosevelt's peace plea.

30 Over half million attend New York World's Fair on opening day.

May 3 Litvinov retires as commissar of foreign affairs, Molotov succeeds him.

5 Poland refuses to yield Danzig to Hitler; offers to negotiate.

7 Military and political alliance between Germany and Italy announced.

17 Quebec welcomes King and Queen of England.

22 Germany and Italy sign ten-year military pact.

23 *Squalus*, United States submarine, sinks in 240 feet of water off Hampton Beach, N. H.

June 1 Townsend old-age pension plan defeated in House.

5 Supreme Court voids Frank Hague's ban on CIO mass meetings.

8 President Roosevelt and King George pledge friendship at state dinner in Washington.

13 Heinrich Himmler sent to crush Czech unrest.

21 Lou Gehrig has rare form of infantile paralysis; can never play baseball again.

July 16 Fritz Kuhn, U. S. No. 1 Nazi, arrested, called drunk, profane.

26 U. S. abrogates 1911 trade treaty with Japan.

Aug. 19 German-Russian 7-yr. trade agreement signed.

21 German-Russian 10-yr. nonaggression pact announced (signed Aug. 24).

- 23 F.D.R. asks Victor Emmanuel to make peace proposal.
- 24 F.D.R. asks Germany and Poland to avoid war.
Pope Pius appeals for peace.
- 25 Britain votes war powers to government.
Poland accepts U. S. peace plea; F.D.R. sends 2nd appeal to Hitler. Polish-British 5-yr. military alliance signed.
- 26 Daladier asks Hitler for peaceful settlement with Poland.
- 27 Hitler rejects Daladier appeal, demands Danzig and Corridor.
- 29 Hitler agrees to negotiations with Poland, asks for Polish delegate by Aug. 30.
- 31 Germany considers negotiation plan rejected when no Polish delegate appears.
Hitler publishes 16-point peace plan; Poland rejects it.
- Sept. 1 Germany invades Poland, annexes Danzig.
Britain, France give Hitler ultimatum to stop hostilities.
- 3 Britain, France declare war on Germany.
British liner *Athenia* torpedoed off Scotland, sinks next day.
- 5 U. S. proclaims neutrality.
- 8 F.D.R. proclaims limited national emergency.
- 10 Canada declares war on Germany.
- 17 Russia invades Poland.
- 18 Nazi, Russian armies meet at Brest-Litovsk, Pol.
- 19 Hitler offers peace if Britain, France accept his territorial gains.
- 20 Britain, France reject Hitler offer.
- 21 F.D.R. asks Congress to repeal arms embargo.
- 23 Germany says conquest of Poland is complete.
- 27 Warsaw surrenders.
- 28 Nazi-Soviet pact signed; partitions Poland.
- Oct. 2 300-mi. safety belt around America voted at Panamá hemisphere conference.
- 6 Hitler offers peace on his terms or war of destruction.
- 9 Germans capture U. S. ship *City of Flint*, take it to Russia.
- 10 Daladier rejects Hitler peace offer.
- 12 Chamberlain also rejects Hitler offer.
- 14 British battleship *Royal Oak* sunk; 300 lost.
- 17 Treaty negotiations broken between Turkey, Russia.
- 18 U. S. closes waters to belligerent submarines.
- 19 Turkey signs 15-yr. mutual assistance pact with Britain, France; Turkey not obliged to fight Russia.
- 26 Russia releases *City of Flint*.
- Nov. 2 Embargo repeal passed by House.
- 4 Roosevelt forbids U. S. ships to enter western European, Baltic or North Sea waters.
- 5 CIO in Canada separates from parent organization in U. S.
- 8 *Life With Father* opens at Empire Theatre, N. Y. C.
Hitler escapes time bomb in Munich beer hall; six killed.
- 20 Chiang Kai-shek elected President of Executive Yüan; H. H. Kung becomes Vice President.
- 23 Nazis use planes to mine British waters.
- 30 Russia attacks Finland from land, sea and air; bombs Helsinki.
- Dec. 1 Roosevelt denounces invasion of Finland as "wanton flouting of law."
- 5 Fritz Kuhn, Bund leader in U. S., gets 2½ to 5 years for forgery, grand larceny.
- 10 U. S. lends Finland \$10,000,000 as Finns call on world to help beat off Red invader.
- 11 League of Nations calls on Russia to halt Finnish war in 24 hours.
- 12 Russia rejects League's demand, declaring she is not at war with Finland.
- 17 *Graf Spee* scuttled off Montevideo by Hitler order after fleeing British warships.
- 19 Nazi liner *Columbus* scuttled in Atlantic to escape capture.
- 23 Roosevelt names Myron C. Taylor as peace envoy to Pope Pius XII.
- 28 Pope Pius XII returns King Victor Emmanuel's visit to the Vatican; first papal visit to Quirinal in more than seventy years.
- 29 Harry Bridges, west coast labor leader, ruled not a Communist.
- DIED: Richard Halliburton, 39, Mar. 23?; S. S. Van Dine, 51, Apr. 11; Ralph Pulitzer, 60, June 14; Havelock Ellis, 80, July 8; Sigmund Freud, 83, Sept. 23; Floyd Gibbons, 52, Sept. 24; George Cardinal Mundelein, 67, Oct. 2; Zane Grey, 64, Oct. 23; Douglas Fairbanks, 56, Dec. 12; Heywood Broun, 51, Dec. 18.

1940 After the blitz in Poland—stalemate, boredom. It seemed a phony war. The French army moped behind the Maginot Line; German work gangs poured concrete along the Westwall. In London the war correspondents in their new uniforms talked it over like critics at a play, found it dull.

In the U. S. they were playing the "Star-Spangled Banner" in the theaters (*Life With Father* had just opened) and people grew misty-eyed when Kate Smith sang "God Bless America!" Wendell L. Willkie was about to write a short piece on national affairs called *We the People*. A new force was rising to challenge U. S. complacency, disturb the apathy of the American people.

Jan. 3 F.D.R. asks wartime powers, urges higher taxes for defense.

11 Navy's 5-year program calls for 150 ships costing \$2,500,000,000.

14 FBI seizes eighteen persons in fantastic plot to seize the government.

22 Earl Browder gets 4 years for passport fraud.

Feb. 15 J. P. Morgan & Co. abandons private banking; becomes public corporation April 1.

Mar. 2 Russians, fighting Finland, crack Mannerheim Line, take Viipuri.

7 *Queen Elizabeth*, world's largest ship, comes to New York for safety from Nazi raids.

13 Soviet-Finnish peace terms end war at noon and give Karelian Isthmus, Viipuri to Russia.

17 Murder, Inc., ring of commercialized killers, uncovered in Brooklyn.

20 Édouard Daladier resigns, Paul Reynaud forms new French cabinet next day to prosecute war to the limit.

28 Sumner Welles returns from European "Peace Mission"—his report to White House is secret.

April 7 Eclipse of the sun.

9 Nazis invade Denmark and Norway; Copenhagen occupied.

15 British land in Norway to combat invader; capture Narvik.

May 2 Allies withdraw from central Norway.

10 Nazis invade Netherlands, Belgium, Luxemburg.

Chamberlain resigns, Churchill takes over as Prime Minister.

11 New York World's Fair reopens at Flushing Meadow.

13 Churchill in historic address tells Britain the war means blood, sweat, tears.

14 German bombers raze Rotterdam as Dutch surrender.

16 Roosevelt asks billion for defense, 50,000 airplanes.

Germans rush into France.

22 F.D.R. confers with Landon on "coalition"; Landon refuses unless F.D.R. gives up third term.

28 Belgium surrenders as cabinet disowns Leopold.

Dunkerque evacuation of British begins.

31 Three-fourths of British army rescued from Dunkerque beaches; tanks, matériel lost.

June 9 Norway surrenders.

10 Italy declares war, invades France.

15 Germans enter Paris (city undefended).

Russia seizes Lithuania; Latvia, Estonia seized 2 days later.

17 F.D.R. asks two-ocean Navy.

18 *PM*, new style newspaper, without advertisements, launched in New York by Marshall Field.

20 Stimson and Knox, Republicans, named to War and Navy posts.

22 France and Germany sign surrender at Compiègne.

28 Wendell Willkie, Charles L. McNary nominated by Republicans at Philadelphia.

Russia seizes Bessarabia from Rumania.

July 1 M. L. Annenberg, Philadelphia publisher, gets 3 years for \$1,200,000 tax evasion.

U. S. orders 45 new warships.

4 Time bomb planted at British Pavilion at New York World's Fair, kills two policemen.

12 Britain and Russia sign 20-year mutual-aid pact.

18 F.D.R. nominated for third term at Chicago; Henry Wallace nominated for Vice President next day.

Aug. 1 Gerhard A. Westrick, Nazi super-agent, discovered carrying on activities in Westchester, N. Y.

6 Mayor Houde of Montreal interned for urging resistance to registration act.

Italians begin drive into Egypt, threatening Suez, Alexandria, British life line.

8 Luftwaffe launches all-out attack on England.

16 Nelson Rockefeller appointed coordinator of Latin-American affairs.

17 Willkie, accepting Republican nomination at Elwood, Ind., challenges Roosevelt to debate; upholds draft.

18 U. S. and Canada announce joint defense plan.

20 Britain offers to lend sea-air bases to U. S.; asks naval aid.

21 Leon Trotsky, 61, dies in Mexico City of wounds inflicted by political agent "Frank Jackson."

English children arrive in the United States, seeking safety from the Nazi air attacks on England.

24 Harry Hopkins, III, resigns as Secretary of Commerce; Jesse Jones succeeds him.

31 Rumania demobilizes, prepares for Nazi occupation.

Senator Ernest Lundeen and 24 others die in airplane crash near Lovettsville, Va.

Sept. 6 Carol II of Rumania abdicates.

7 House passes Selective Service Bill, 263-149.

Vichy government arrests Gen. Maurice Gamelin, Paul Reynaud, Edouard Daladier.

12 Kenvil, N. J., powder plant explosion kills 49, injures 200.

13 Willkie opens campaign; his voice gives out after 2-day blast against F.D.R. and New Deal.

14 Italians invade Egypt.

16 Roosevelt signs draft law.

23-25 Dakar beats off British-French sea attack; thwarts De Gaulle's invasion attempt.

27 Germany, Italy, Japan sign 10-year military pact.

Oct. 3 H. G. Wells says U. S. should keep out of the war; our party politics would mess up the peace.

4 Hitler, Mussolini meet at Brenner Pass, lay plans for long war.

6 Pope Pius calls on women of the world to reject immodest fashions.

7 Reichswehr occupies Rumania.

16 U. S. registers 17,000,000 for selective service.

23 Hitler and Franco meet at Hendaye.

24 Hitler and Pétain meet, pledge collaboration.

27 New York World's Fair closes; 45 million paid admissions in 2 years.

28 Italy invades Greece.

Nov. 5 Roosevelt re-elected, wins 38 states to Willkie's 10; Democrats keep Congress.

7 Third largest suspension bridge collapses in high wind at Tacoma, Wash.

8 Hitler says U. S. aid cannot save Britain.

9 Neville Chamberlain, British Prime Minister at start of war, dies at 71.

11 British air attack smashes Italian fleet at Taranto.

12-13 Vlachoslav Molotov at Berlin (first time he ever left Russia); holds two-day talk on Soviet's place in "New Order."

14 Nazis bomb Coventry, leave historic city in ruins.

15 Strike at Downey, Calif., Vultee plant ties up \$50,000,000 plane production (12 days).

17 Italians driven off Greek soil.

18 John L. Lewis quits as CIO head, following pledge to resign if Roosevelt was re-elected.

20 Hungary joins Axis.

Dec. 1 Gen. Manuel Avila Camacho sworn in as President of Mexico.

5 British House of Commons rejects proposal for negotiated peace.

9 Gen. Sir Archibald Wavell launches counterattack in Egypt.

11 British recapture Sidi Barrani in Egypt from Italians.

14 The Sixth Avenue branch of New York's Independent Subway system opens.

23 Viscount Halifax becomes British Ambassador to U. S.; Anthony Eden named Foreign Secretary.

29 F.D.R. announces aid to Britain; calls for full war aid to Britain; U. S. "Arsenal of Democracy."

DIED: William E. Borah, 74, Jan. 19; Luisa Tetrizzini, 68, Apr. 28; Emma Goldman, 70, May 14; Ben Turpin, 71, July 1; William B. Bankhead, 66, Sept. 15; Tom Mix, 60, Oct. 12; F. Scott Fitzgerald, 44, Dec. 21.

1941

This was the winter of the long blitz. The Luftwaffe rained bombs methodically on England. The Nazi war machine had rolled through the Balkans and was pushing across the rim of North Africa toward Suez, threatening the British life line. Lend-Lease was about to begin, over the bitter protests of isolationists. Already plants were expanding. The cry was for machine tools, aluminum, mechanics. While selective service took the youngsters, the able-bodied, the unmarried, industry's demands started a feverish migration from farms and towns to San Diego, Hartford, Paterson, Seattle, Kansas City, Detroit, Bridgeport. The "Arsenal of Democracy" was beginning its gigantic task. The training of the first raw conscripts had started. In newly staked-out Army camps thousands of wooden barracks and mess halls rose to the clatter of hammer and saw.

- Jan. 1 Ban by ASCAP bars most U. S. music from air.
 5 British take over 25,000 Italian prisoners in North Africa.
 7 William S. Knudsen and Sidney Hillman named U. S. defense production heads with equal powers.
 8 Admiral Husband E. Kimmel named to command U. S. Fleet.
 20 Hitler and Mussolini meet in Germany, agree to greater Nazi participation in Mediterranean area.
 22 British take Tobruk.
 24 Four-day revolt of Iron Guard quelled after about 6,000 are killed in Rumania.
 27 Wilkie and Churchill confer in London.

- Feb. 10 Britain breaks with Rumania.
 11 Nazis reported flying troops into Balkans.
 26 Britain wins all Somaliland in East Africa.

- Mar. 1 Bulgaria joins Axis; Nazis troops move in.
 11 F.D.R. signs Lend-Lease Bill.
 15 British rush army to Greece as Nazis move into Balkans.
 25 Yugoslavs sign with Axis, touching off riots and revolt; government flees.
 30 U. S. seizes 30 Axis and 35 Danish ships in harbors here.

- April 1 CIO calls Ford strike. Soft coal strike begins.
 6 Germany marches on Yugoslavia and Greece.

- 8 Yugoslav line breaks before mechanized invasion.
 13 Belgrade falls; demoralized Yugoslavs take to the hills.
 Russia, Japan sign 5-yr. neutrality pact in Moscow.
 17 Yugoslavs surrender: Gen. Draja Mihailović continues guerrilla warfare.
 27 Nazi tanks roll into Athens as remnants of British army quit Greece.
 28 Lindbergh, called "Copperhead" by F.D.R., gives up Army Reserve commission.
 May 6 Stalin takes Soviet premiership from Molotov.
 10 Rudolf Hess, Nazi Deputy Fuehrer, lands in Scotland by plane.
 Strike ties up \$500,000,000 ship contracts in West Coast yards.
 11 Worst air raid on London takes 1,436 lives.
 15 U. S. seizes *Normandie*, 10 more Vichy ships.
 19 Italian forces in Ethiopia surrender to British.
 20 LaGuardia named director of Office of Civilian Defense.
 Nazis launch airborne invasion of Crete.
 24 HMS *Hood*, biggest British warship, sunk by Nazi battleship *Bismarck*.
 27 *Bismarck* sunk by British naval, air attack.
 Roosevelt proclaims unlimited emergency.
 June 1 Crete overrun by Nazis.
 2 Hitler and Mussolini meet at Brenner Pass.
 4 Ex-Kaiser Wilhelm of Germany dies at 82.
 12 Harlan Fiske Stone to succeed Charles E. Hughes as Chief Justice; Jackson, Byrnes named to Supreme Court.
 18 Turkey signs amity pact with Germany.
 20 Ford signs with CIO.
 21 British and Free French capture Damascus.
 22 Hitler launches attack on Russia.
 July 5 Nazis reach the Dnieper.
 7 U. S. occupies Iceland bases to supplement British troops.
 12 Nazis break "Stalin Line," fan out toward Kiev, Moscow, Leningrad. Britain and Russia sign war pact, bar separate peace.

- 20 British broadcast calls for "V for Victory" campaign—launching famous symbol.
- 25 U. S. freezes Japanese assets, cuts off oil, bans silk.
- Aug. 12 Pétain summons France to full support of Hitler, backs war against Russia. House extends military service for a year and a half by a single vote, 203 to 202.
- 14 F.D.R. and Churchill announce agreement on war aims, future hopes in historic Atlantic Charter.
- 20 Russians blow up Dnieper dam as Nazis sweep across Ukraine.
- 22 Nazis reach outskirts of Leningrad.
- 27 Laval wounded at review of French troops raised to fight Russia.
- 28 Iran yields to British-Soviet troops; agrees to protective occupation.
- 31 F.D.R. warns peril to nation greater than in 1939.
- Sept. 4 U. S. destroyer *Greer*, attacked by Nazi sub, fights back.
- 8 Leningrad encircled by Nazis; siege begins.
- 11 F.D.R. orders Navy "shoot first" if Axis raiders enter U. S. zone.
- 12 Germans threaten countermeasures to U. S. "shoot first" policy.
- 13 Mrs. Eleanor Roosevelt named assistant director of Office of Civilian Defense by LaGuardia.
- 19 Nazis take Kiev and Poltava.
- Oct. 3 Hitler announces Russia is defeated and "will never rise again."
- 8 Nazis take Orel in drive toward Moscow.
- 16 Jap cabinet falls in crisis; Tojo, army firebrand, new Premier. House votes to arm American merchant ships.
- 17 U. S. destroyer *Kearny* torpedoed off Iceland; 11 lost.
- 30 U-Boat sinks U. S. destroyer *Reuben James* with loss of 100 off Iceland.
- Nov. 3 Nazis overrun Crimea, head for Sevastopol.
- 6 Maxim M. Litvinov named Russian Ambassador to U. S.
- 12 Russians halt Nazis at gates of Moscow.
- 13 House accepts neutrality act revision for arming U. S. ships.
- 15 Saburo Kurusu, Jap peace envoy, arrives at Washington.
- 18 British open powerful offensive in Libya as aid to Russians.
- 22 Nazis take Rostov.
- 26 Hull presents final terms to Jap envoys.
- Dec. 1 U. S. - Japanese tension rises as F.D.R. sees Navy chief. Japan moving troops in Indo-China; British fleet reaches Singapore.
- 6 F.D.R. sends appeal to Hirohito, urging peace. England declares war on Finland, Rumania and Hungary.
- 7 Japan attacks Pearl Harbor, Philippines, Guam, forcing U. S. into war; Pacific Fleet crippled.
- 8 Congress votes war, 470-1; Britain declares war on Japan. Berlin announces drive on Moscow is off for the winter.
- 9 Japs invade Malaya.
- 10 Japs land on northern Luzon in the Philippines. Jap planes sink British battleships *Prince of Wales* and *Repulse* off Malaya.
- 11 German, Italian declarations of war on U. S. bring quick response from Congress.
- 12 Japs seize Guam, attack Midway, Wake.
- 14 Japs attack Hong Kong.
- 16 Justice Owen Roberts heads Pearl Harbor inquiry.
- 17 Chester Nimitz succeeds Kimmel as head of Pacific Fleet.
- 20 MacArthur made full general; Admiral King given top command of U. S. Naval forces.
- 21 Hitler ousts Field Marshal Walther von Brauchitsch, takes supreme army command with rank of Field Marshal.
- 22 Churchill at White House for war parleys.
- 25 Hong Kong falls.
- 27 Japs bomb Manila (open city).
- 28 Japs invade Sumatra.
- DIED: Joe Penner, 36, Jan. 10; James Joyce, 58, Jan. 13; Willis VanDevanter, 89, Feb. 8; King Alfonso XIII of Spain, 54, Feb. 28; Sherwood Anderson, 64, Mar. 8; Virginia Woolf, 59, Mar. 28?; Lou Gehrig, 37, June 2; Ignace Jan Paderewski, 80, June 29; Sir Rabindranath Tagore, 80, Aug. 7; Louis Brandeis, 84, Oct. 5; Helen Morgan, 41, Oct. 8; Simon Gugenheim, 73, Nov. 2.

- 1942 Those little Japanese, they must be crazy! So we mumbled and fumed that Sunday afternoon. They were crazy, but they had sunk half our fleet (except the carriers), crippled a great naval base, reduced our Pacific sea power dangerously. They had driven us to panic, then into rage and confusion. We shook that off. We were in it now, up to our ears. The confusion cleared. The carping clamor of the isolationists died out—to be followed almost immediately by a shrill Communist clamor for a second front.
- Russia was in desperate straits that winter. The war tempo came to America. Blackouts, air-raid wardens, civilian defense, censorship, draft boards, ration books, Knudsen-Hillman. No more automobiles. Already our planes were streaming onto English airfields; shiploads of trucks and tanks were unloading on the Persian Gulf for transit to Russia. We were in Iceland, Bermuda, on the shoulder of South America. We were in it—for keeps.
- Jan. 2 MacArthur gives up Manila; fights on for Bataan, Corregidor.
13 Donald Nelson made chairman of War Production Board.
26 U. S. troops land in Northern Ireland.
31 First U. S. Navy task force attack on Marshall and Gilbert Islands.
- Feb. 10 *Normandie* capsizes after fire at N. Y. pier; sabotage theory rejected by Naval officers.
15 British surrender Singapore.
23 Axis submarine shells California coast (little damage).
28 Japs invade Java.
- Mar. 8 They land on New Guinea at Salamaua and Lae.
17 MacArthur arrives in Australia from Philippines; promises to reorganize Pacific forces.
29 Britain offers India dominion status after war with right to quit Empire. Indian leaders reject it.
- April 9 U. S. forces on Bataan surrender.
14 Laval becomes Premier of France.
18 Tokyo and Yokohama bombed by U. S. planes from carrier *Hornet*.
- May 4-9 Jap fleet defeated with heavy loss in Battle of Coral Sea, carrier plane action.
6 General Wainwright surrenders Corregidor.
15 Gas rationing starts in 17 eastern states and D. C.
30 Over 1,000 RAF planes smash Cologne in war's mightiest raid..
- June 4-6 U. S. Pacific Fleet stops Jap sea-power in crucial Battle of Midway.
10 Lidice, Czech., razed, all males put to death in Nazi terror following Heydrich assassination, Berlin announces.
12 Japs land on Attu in Aleutians; Jap ships reported in harbor of Kiska.
- July 2 Rommel's Afrika Korps flanked by British at El Alamein.
21 Leahy named F.D.R.'s chief of staff.
- Aug. 7 U. S. Marines land in Solomons, seize Tulagi and Guadalcanal, first step on road to Tokyo.
- Sept. 12 Russians temporarily halt Nazis at Stalingrad; more than 1 million engaged in crucial siege.
- Oct. 3 F.D.R. orders price, wage, rent stabilization; names Byrnes director of Office of Economic Stabilization.
24 Montgomery attacks Rommel's El Alamein line in Egypt.
- Nov. 3 Dewey elected N. Y. Governor by 650,000, defeating John J. Bennett, Jr.
8 U. S. and England land great army in French North Africa; largest invasion operation in history.
11 Nazis begin occupation of all France.
14 Eddie Rickenbacker and companions rescued after 24 days adrift in Pacific after plane crash.
13-15 U. S. smashes Jap armada in Solomons.
18 Pétain makes Laval dictator of France.
27 French scuttle main part of fleet at Toulon to save it from Nazis.
28 About 500 dead in Boston night club fire at Cocoanut Grove.
- Dec. 1 Beveridge submits cradle-to-grave security plan to end want and worry in Britain.
7 Pearl Harbor anniversary observed throughout U. S. with solemn pledges for victory.
15 MacArthur takes Buna, N. G.
19 British attack on Burma announced.
24 Darlan, 61, French turncoat and civilian administrator in Africa, assassinated.
- DIED: Carole Lombard, 33, Jan. 16; Grant Wood, 49, Feb. 12; Albert Payson Terhune, 69, Feb. 18; Graham McNamee, 53, May 9; Thomas J. Mooney, 60, Mar. 6; John Barrymore, 60, May 29; May Robson, 84, Oct. 20; George M. Cohan, 64, Nov. 5; Edna May Oliver, 59, Nov. 9.

1943 The war maps showed a U. S. Army pushing the Nazis back in Tunisia; Rommel's Afrika Korps streaming through Tripoli in retreat. American men, tanks and planes were in action at last.

MacArthur had stopped the Japs on New Guinea, was building a base in Australia. Our Navy had rallied in the Pacific and was getting ready to take the offensive. At home the shrill outcry for a second front mingled with the drive to sell war bonds, scrap metal drives. Beneath these surface excitations was the steady roar of machinery, the surge and thunder of blast furnaces and rolling mills. The blueprint stage was past. We were making the stuff.

Eighteen miles northwest of Knoxville that winter, woodsmen were clearing a Tennessee hillside. A building operation was about to begin, Manhattan Project, at Oak Ridge, something connected with science, and the war.

- Jan. 11 F.D.R. calls for \$100 billion for war.
- 14-24 Casablanca Conference: Roosevelt and Churchill agree on unconditional surrender goal.
- 18 Russians announce breaking of 17-month Leningrad siege.
- 27 First all-U. S. air raids over Reich.
- 31 German 6th Army reported virtually destroyed at Stalingrad; turning point of war in Russia.
- Feb. 9 Japanese evacuate Guadalcanal.
- 11 Dwight D. Eisenhower made full general; will command Allied armies in North Africa.
- 16 Russians take Kharkov.
- Mar. 2-3 Japs lose 10 warships, 12 transports as Allied planes smash convoy in Battle of Bismarck Sea.
- 28 British crash Mareth Line in Tunisia.
- April 7 Advance forces of U. S. 2nd Army and British 8th Army meet in Tunisia.
- 8 President curbs prices, pay, job changing.
- 19 Reports tell of Nazi annihilation of 2,000,000 European Jews by gas chamber, mass execution.
- May 7 Americans take Bizerte; British seize Tunis.
- 11 Americans land on Attu in Aleutians.
- 12 Remnants of Nazis trapped on Cape Bon, ending war in Africa.
- 15 Third International (Comintern) dissolved in Moscow.
- June 1 Leslie Howard, 50, lost in plane believed shot down by Nazis.

- 4 House votes drastic antistrike bill.
- 22 Army enters Detroit to quell race riots.
- 30 MacArthur makes landings at New Guinea, Trobriand, Rendova.
- July 9 Allies invade Sicily.
- 25 Mussolini deposed. King and Pietro Badoglio rule Italy.
- Aug. 17 Sicily conquest complete as Messina is captured.
- 21 Russians replace Litvinov as U. S. Ambassador with Andrei Gromyko.
- Sept. 3 British Eighth Army lands in Italy, crossing Strait of Messina.
- 4 MacArthur lands near Lae, N. G.
- 8 Italy's unconditional surrender announced.
- 9 Mark Clark's Fifth Invades at Salerno.
- 10 Nazis seize Rome.
- 25 Edward Stettinius, Jr., named to replace Sumner Welles as Undersecretary of State.
- Oct. 13 Italy declares war on Germany.
- 19-Nov. 1 Moscow Conference: Hull, Eden, Molotov pledge unity to win war and establish world organization; promise democratic Italy and free Austria.
- Nov. 6 Russians retake Kiev.
- 20 Marines land at Tarawa and other Gilbert islets.
- 22-26 Cairo Conference: Roosevelt, Churchill, Chiang pledge defeat of Japan, free Korea.
- 26 Russians retake Gomel.
- 28-Dec. 1 Teheran Conference: Roosevelt, Churchill, Stalin agree on invasion plans.
- Dec. 24 Eisenhower named to command invasion of Europe.
- 26 Nazi pocket battleship *Scharnhorst* sunk by British off northern Norway.
- Marines land on Cape Gloucester, New Britain.
- 27 U. S. seizes railroads to bar strike.
- DIED:** George Washington Carver, 79, Jan. 5; Alexander Woolcott, 56, Jan. 23; Stephen Vincent Benét, 44, Mar. 13; J. P. Morgan, 75, Mar. 13; Conrad Veidt, 50, Apr. 3; Edsel Ford, 49, May 26; Sergei Rachmaninoff, 69, May 28; William Lyon Phelps, 78, Aug. 21; Ben Bernie, 52, Oct. 20; Max Reinhardt, 70, Oct. 31; Fats Waller, 39, Dec. 15.

1944

Through the big staging depots behind the seaport cities endless streams of men moved toward the docks. Trainloads, busloads; sunburned, hardened soldiers loaded with gear, men of college age, weaned from family and home; tough, casual young Americans on their way to war.

Railway stations and bus terminals eddied with hurrying, uniformed figures. Broadway and Main Street were overrun. War had reached concert pitch. England bulged with uniformed men, fighter and bomber pilots, tanks, trucks, matériel. Ships in great sprawling convoys were moving across the Atlantic; tankers, troopships, supply ships, ammunition ships, LST's, LCI's, assembling around the rim of the British Isles for D-Day.

In the Pacific, Task Force 58 with its new fast Essex class carriers was ranging from the Solomons to the Gilberts and Marshalls. The Navy was about to begin its swift relentless conquest of the Pacific stepping stones to Japan.

- Jan. 4 Russian army over Polish line.
 11 F.D.R. calls for a national service law to prevent strikes.
 22 Allied troops land behind German lines at Anzio near Rome.
 31 Marines and Army troops land on Kwajalein Atoll in the Marshalls.
- Feb. 15 The Abbey of Monte Cassino bombed by Allied planes.
 29 American troops land on Admiralty Islands in the Pacific.
- Mar. 4 U. S. planes attack Berlin for the first time.
 19 Russians reach Rumanian border.
- April 5 Wendell L. Willkie withdraws from Presidential race.
 10 Russians retake Odessa.
 26 U. S. Army seizes Montgomery Ward and Company in Chicago as a result of a strike.
- May 9 Russians retake Sevastopol.
 18 Germans evacuate Cassino.
- June 4 Rome falls to the Allies.
 6 American, British and Canadian forces land in France, D-Day.
 11 Russians open drive against Finland.
 15 New B-29 Superfortresses bomb Japan for the first time.
 Germans begin robot bomb attacks on England.
 26 Cherbourg falls to the Allies.
 28 Governor Thomas E. Dewey of New York is nominated for President.
- July 3 Minsk, last great Russian city held by Nazis, taken by Russians.

- 6 152 die, 250 are hurt in Hartford, Conn., circus fire.
 8 Salpan conquest is complete.
- 20 Hitler wounded in bomb plot. F.D.R. nominated for President. American forces land on Guam.
- 21 Harry Truman nominated for Vice President.
- Aug. 2 Turkey breaks off diplomatic relations with Germany.
 15 Allies land in south France.
 23 Marseilles, Grenoble fall.
 25 Paris freed by U. S. and French troops.
- Sept. 4 Antwerp, Brussels fall to Allies. Finns quit war with Russia, ask Germans to leave the country.
 11 Americans enter Germany.
 14 Marine 1st Division lands in Palau.
 17 Allied air-borne army lands in Holland.
 24 Czechoslovakia and Hungary are invaded by Red army.
- Oct. 4 American forces break through the German Westwall.
 6 Moscow announces Second Ukrainian Army invaded Hungary.
 13 U.S.S.R. captures Riga, Latvia.
 20 U. S. troops invade the Philippines. Aachen falls to the Americans after nineteen days.
 28 Bulgaria signs Soviet armistice terms.
- Nov. 7 President Roosevelt re-elected for a fourth term.
 16 Allies launch general offensive on 300-mile front.
 27 Cordell Hull resigns as Secretary of State. Edward Stettinius, Jr., named Secretary of State.
- Dec. 15 Americans land on Mindoro, 150 miles from Manila.
 16 German counteroffensive launched in Belgium.
 24 Americans temporarily halt the Nazis on the ninth day with help of 7,000-plane raid.
 29 Russians penetrate into Budapest, Hungary.
- DIED: William Allen White, 75, Jan. 29; Irvin S. Cobb, 67, Mar. 10; Hendrik Van Loon, 62, Mar. 11; Frank Knox, 70, Apr. 28; Almee Semple McPherson, 53, Sept. 27; Al Smith, 70, Oct. 4; Wendell Willkie, 52, Oct. 8; Boake Carter, 46, Nov. 16; Glenn Miller, 35, Dec. 15; Harry Langdon, 60, Dec. 22; Charles Dana Gibson, 77, Dec. 23; Romain Rolland, 78, Dec. 30.

1945

It was mostly downhill now. The great American war potential had delivered the goods. America's industrial strength, translated into tanks, trucks, planes, jeeps, was closing in on Germany. The Battle of the Bulge was the Nazis's last desperate stroke and it didn't quite come off. Along the Pacific seaboard, Navy convoys were loading for Iwo and Okinawa. From newly captured Saipan and Tinian, B-29's were pounding Japan's industrial centers to rubble. The war had come to its last decisive phase. Here at home the nation churned with ultimate activity. Everyone had a job, everyone had money. Hotels, night clubs, theaters, roadhouses, juke joints reflected the tension and hysteria. Victory was in the air.

- Jan. 9 General Douglas MacArthur lands invasion force in Lingayen Gulf, Luzon; wins 15-mile beachhead.
- 12 German line crumbles; Allies regain 100 square miles in "Bulge."
- 17 Russians take Warsaw by encirclement.
- 21 Jesse Jones out of Cabinet to make way for Henry Wallace as Secretary of Commerce.
- 24 Russians cross the Oder.
- 26 Yankees sold to McPhail-Topping syndicate for \$3,000,000.
- 30 U. S. Rangers rescue 513 from Jap prison camp in daring Luzon raid.
- Feb. 3 U. S. Army breaches Westwall; drives last Nazis from Belgium. U. S. troops enter Manila.
- 5 Trapped Japs fire Manila, business area in flaming ruins. Third Army smashes through Siegfried Line.
- 7 Russians reach outer defenses of Berlin.
- 12 Big Three at Yalta agree to disarm Germany forever.
- 13 Russians take Budapest after 50-day siege.
- 19 U. S. Marines land on Iwo Jima.
- 23 Marines raise flag on Mt. Suribachi.
- 24 Egyptian Premier assassinated as Egypt declares war on Axis.
- Mar. 2 U. S. Ninth Army reaches Rhine at Düsseldorf.
- 7 Lt. Gen. Courtney H. Hodges' First Army crosses Rhine south of Cologne.
- 10 B-29's begin incendiary raids on Japan, set great fires in Tokyo.
- 16 Iwo Jima, toughest Pacific Island, falls to U. S. after 25-day assault.

22 Field Marshal Albert Kesselring takes Nazi command in West, replacing Field Marshal Karl R. G. von Rundstedt.

Patton's Third Army crosses the Rhine.

30 Russians take Danzig.

April 1 U. S. Tenth Army invades Okinawa.

5 Second Japanese Cabinet falls.

11 Ninth Army reaches the Elbe in 50-mile surge; Russians drive past Vienna.

12 F. D. Roosevelt, 63, dies of cerebral hemorrhage at Warm Springs, Ga., at 3:35 p.m. Harry S. Truman sworn in to succeed him.

13 Russians take Vienna, seize 120,000 Nazis.

16 Truman, taking office, pledges unconditional surrender, international organization for peace as his goals.

18 Ernie Pyle, 44, killed on Ie Shima.

20 Seventh Army takes Nuremberg.

21 Russians edge into Berlin.

23 Nicholas Murray Butler retires after 44 years as president of Columbia University.

25 United Nations parley opens at San Francisco. Americans and Russians meet on the Elbe.

26 Bremen falls to British; Henri Philippe Pétain captured at French border.

28 Benito Mussolini, 61, and mistress Clara Petacci killed at Lake Como; bodies exhibited in streets of Milan next day.

30 Russian flag raised over Reichstag.

May 1 Grand Admiral Karl Doenitz takes command in Germany, announcing death of Hitler, 56.

2 Berlin falls.

4 Nazis give up Denmark, Netherlands, North Germany.

7 Germany surrenders unconditionally at 2:41 A.M. (French time).

11 Kamikaze attacks on U. S. Carrier Bunker Hill kills 373 off Okinawa.

23 Truman in postwar cabinet shift replaces Attorney Gen. Francis Biddle with Tom C. Clark, Secretary of Agriculture Claude E. Wickard with Clinton P. Anderson, Frances Perkins, Secretary of Labor, with Lewis B. Schwellenbach.

Churchill dissolves British war cabinet; calls election.

- Admiral Doenitz and aides seized. Heinrich Himmler, 44, commits suicide by poison.
- 26 Vast Tokyo area—18.6 square miles—burned out by double raid of B-29's.
- June 6 Gov. Thomas E. Dewey names anti-discrimination board to combat racial and religious discrimination in employment.
- 14 Joachim von Ribbentrop, Nazi foreign minister, seized in Hamburg.
- 21 Okinawa won by U. S. Tenth Army.
- 26 United Nations Charter signed at San Francisco.
- 27 Edward R. Stettinius, Jr., resigns as Secretary of State to become U. S. delegate to United Nations.
- July 2 James F. Byrnes named Secretary of State.
- 13 U. S. surface fleet begins bombardment of Japan.
- 15 Lights in Britain shine at night for first time since Sept. 3, 1939.
- 17 Truman, Churchill, Stalin meet at Potsdam for final war conference.
- 21 U. S. serves Japan with unconditional surrender ultimatum on Potsdam terms.
- 26 Churchill out, Attlee in as British election returns show overwhelming sweep for Labour party. Attlee replaces Churchill at Potsdam conference.
- 28 Army bomber crashes into Empire State Building in fog; 13 killed, 26 hurt.
- Aug. 2 Potsdam parley agrees on future of Germany; reparations, peace preliminaries.
- 6 Hiroshima blasted by atomic bomb dropped by U. S. Army Air Force. (Trial bomb tested in New Mexico, July 16.)
- 8 Russia declares war on Japan.
- 9 Nagasaki hit by second atomic bomb.
- 10 Japan submits surrender offer; asks Emperor retain sovereignty.
- 14 Japan accepts surrender terms; war ends. MacArthur to direct occupation.
- 16 Pétain guilty of treason; death sentence commuted to life imprisonment by Provisional President Charles de Gaulle.
- 27 U. S. Third Fleet enters Japanese waters.
- 30 MacArthur lands in Japan.
- Sept. 2 Japanese sign surrender aboard battleship *Missouri* in Tokyo Bay. V-J Day.
- Stalin in victory broadcast claims Kuriles and Sakhalin for Russia.
- 11 Gen. Hideki Tojo, wartime premier, shoots himself in futile suicide attempt.
- 14 Ford production halts; 50,000 made idle by wave of suppliers' strikes.
- 18 Robert P. Patterson, Under Secretary, succeeds Henry L. Stimson as Secretary of War.
- Oct. 3 Truman suggests world ban atom bomb in war; asks federal control on atomic development in U. S.
- 9 Pierre Laval, 62, sentenced to die as traitor (dies Oct. 15).
- 18 Twenty-four Nazi ringleaders indicted as war criminals.
- 23 President Truman calls for universal military training for U. S. youth in peacetime.
- 29 Getulio Vargas resigns as President of Brazil after 15-year regime.
- Nov. 6 O'Dwyer elected Mayor of N. Y.; Tammany back after 12 years.
- 15 Truman, Attlee, King decide in Washington conference that atom bomb secrets will not be shared until United Nations devise firm control plan.
- 20 General Motors strike called; 200,000 out next day.
- Dec. 12 Truman names fact-finding board in General Motors strike.
- 15 Prince Fumimaro Konoye, three times premier of Japan, commits suicide rather than face trial.
- 16 Truman names Secretary Byrnes, Stettinius, Senator Tom Connally, and Mrs. Eleanor Roosevelt delegates to the United Nations.
- 21 Gen. George S. Patton, Jr., 60, dies of injuries in motor accident. Archbishop Francis J. Spellman, three others in U. S. among 32 named Cardinals by Pope.
- 27 Big Three agree on Atomic Energy Commission for United Nations.
- DIED:** Thomas J. Pendergast, 72, Jan. 26; David Lloyd George, 82, Mar. 26; Joseph Goebbels, 47, May 3?; Alla Nazimova, 66, July 13; Franz Werfel, 54, Aug. 26; John McCormack, 61, Sept. 16; Jerome Kern, 60, Nov. 11; Robert Benchley, 56, Nov. 21; Theodore Dreiser, 74, Dec. 28.

1946 The first full year of peace. Peace? Labor fought capital in the U. S. as never before—four and a half million men were involved in strikes. Congress and President Truman fought over price controls. Results: prices zoomed. You could pay \$2.75 for one hamburger at a restaurant, or \$17.50 for one shirt. Peace? You should have heard what the Republicans called the Democrats. The Republicans won Congress. Peace? Interminable wrangling among the Big Four victors. Finally they grudgingly agreed on compromise peace treaties, but only for the small-fry enemies, not for Germany or Japan. And the shaky walls of the young United Nations edifice were almost knocked down by the quarrels between Russia and the Western nations. A total of 11,000 divorces was granted in Reno—an all-time record. The U. S. nonfiction best seller was *Peace of Mind*.

Jan. 3 William Joyce ("Lord Haw Haw" on German radio) is hanged in London as traitor.

7 American occupation troops hold mass demonstrations saying they "wanna go home"; demonstrations spread to India, Korea, Japan, Philippines, France, Germany.

10 U. S. Army hits the moon with radar impulses.

General Assembly of the United Nations meets first time in London.

15 200,000 CIO electrical workers strike.

17 United Nations Security Council meets for the first time in London.

20 General Charles de Gaulle resigns as President of France.

21 750,000 steel workers strike.

Truman warns of inflation and subsequent depression.

24 U. N. General Assembly creates Atomic Energy Commission.

25 John L. Lewis and his United Mine Workers rejoin American Federation of Labor, which they had bolted in 1936.

Feb. 12 State Department accuses Argentina of helping Nazis plot conquest in South America.

13 Ickes, Secretary of the Interior for thirteen years, resigns.

24 Argentina elects Perón President.

Mar. 4 England, France and U. S. publish documents showing Franco's collaboration with Axis, and call on the Spanish people for "peaceful withdrawal" of Franco.

6 Japan publishes draft of new constitution abolishing army, navy, air forces forever, making war unconstitutional.

April 1 400,000 UMW soft-coal miners begin nationwide strike.

3 Firing squad executes Lt. Gen. Masaharu Homma, who ordered Bataan Death March.

8 League of Nations meets for last time in Geneva; puts itself out of existence (Apr. 18).

25 Council of Foreign Ministers (Byrnes, Bevin, Molotov and Bidault) meets in Paris to draw up peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland.

29 U. S. proposes treaty with England, Russia and France to keep Germany disarmed twenty-five years.

May 9 King Victor Emmanuel III abdicates, hoping Italy's monarchy can be saved by his son, Humbert, who takes throne.

17 Truman seizes railroads in face of strike threat.

June 2 Italy votes to abolish monarchy.

3 Twenty-eight Japanese war leaders go on trial in Tokyo.

6 John Wesley Snyder named Secretary of Treasury; Fred M. Vinson, Chief Justice.

11 Truman vetoes Case Bill restricting strikes.

29 Truman vetoes price control bill, letting OPA expire; but he hopes Congress will extend the present law. Congress does not; OPA expires. British arrest 2,718 Jews in Palestine, trying to round up terrorists.

July 1 Army superfortress drops atom bomb in first test at Bikini Atoll; 5 ships sunk, 9 heavily damaged.

4 U. S. grants Philippines independence. Mobs kill 36 Jews in pogrom in Kielce, Pol.

13 Congress approves \$3,750,000,000 loan to England.

15 Yugoslavia condemns General Mikhailović to be shot.

17 Isolationist Senator Burton K. Wheeler beaten for Democratic renomination in Montana after twenty-four years in Senate.

- 25 Second atom bomb is tested at Bikini, exploded under water; battleship, aircraft carrier and eight other craft sent to bottom. OPA is revived after lapse of twenty-five days as Truman signs new bill.
- 26 Congress puts U. S. atom control in hands of civilian board.
- 29 Twenty-one nations assemble in Paris to discuss peace treaties with Italy, Bulgaria, Rumania, Hungary and Finland. Treaties had been prepared by Big Four Council of Foreign Ministers, with some points still in dispute. England accepts American proposal for economic co-operation between their German occupation zones.
- Aug. 13 Russia reveals it has demanded from Turkey a share in the military control of the Dardanelles.
- 14 La Follette dynasty in Wisconsin is overthrown when Republicans fall to renominate Sen. Robert M. La Follette, Jr.
- 21 U. S. gives Yugoslavia 48 hours to free occupants of U. S. planes forced down over Yugoslavia.
- 22 Yugoslavia frees 7 Americans held since Aug. 9.
- Sept. 1 Greece votes to bring back King George II.
- 2 First all-Indian government inaugurated; Jawaharlal Nehru heads cabinet.
- 8 Nine-year-old King Simeon II of Bulgaria loses his throne as nation votes to abolish monarchy.
- 20 Truman fires Henry Wallace from the Cabinet.
- 24 Stalin says he sees no real danger of war with U. S. and Britain.
- Oct. 1 Twelve top Nazis sentenced to die by Nuremberg tribunal; seven sent to prison; three acquitted. *Truculent Turtle*, Navy plane, sets nonstop distance record, flying 11,236 miles from Perth, Australia, to Columbus, Ohio, in 55 hours, 15 minutes.
- 12 Henry Wallace becomes editor of *New Republic*.
- 13 France adopts a new constitution, by narrow margin of 1,000,000 votes, despite De Gaulle's opposition.
- 15 Paris Peace Conference adjourns; disputed points will go back to Council of Foreign Ministers for final decision.
- Goering, 53, kills himself with cyanide of potassium a few hours before ten other Nazis are executed at Nuremberg.
- 22 German Social Democratic party protests deportation of German workers to Soviet Union.
- Nov. 4 British disclose that Hindu-Muslim riots in India have cost 5,018 lives in the last four months.
- 5 Republican landslide overturns Democratic control of Senate and House.
- 6 U. S. proposes to put Japanese Pacific islands under United Nations trusteeship.
- 9 Truman ends all price and wage controls, except on rents, sugar and rice.
- 15 Dutch end 15-month strife in Java by tentatively recognizing Indonesian Republic.
- 21 National strike of UMW soft-coal miners begins.
- Dec. 1 Miguel Alemán sworn in as President of Mexico.
- 2 James C. Petrillo, charged with violation of Lea Act, is acquitted by Federal judge in Chicago.
- 3 O. Max Gardner named Ambassador to Great Britain.
- 4 Judge Goldsborough fines John L. Lewis \$10,000 and UMW \$3,500,000 for not calling off coal strike (UMW fine reduced to \$700,000 by Supreme Court, Mar. 6, 1947).
- 6 Dr. Julian Huxley elected director-general of UNESCO.
- 7 Worst disaster of the year in U. S.—pre-dawn fire sweeps Winecoff Hotel in Atlanta, Ga., killing 119.
- 14 U. N. accepts Rockefeller gift of permanent headquarters site in midtown New York City.
- 19 U. N. Assembly unanimously votes resolution for general disarmament.
- 30 U. N. Atomic Energy Commission accepts U. S. atom control plan, 10 to 0, Russia and Poland abstaining.
- DIED: Slim Summerville, 51, Jan. 5; Harry Hopkins, 55, Jan. 29; E. Phillips Oppenheim, 80, Feb. 3; George Arliss, 77, Feb. 5; Booth Tarkington, 76, May 19; Jack Johnson, 68, June 10; William S. Hart, 73, June 23; Gertrude Stein, 72, July 27; Tony Lazzeri, 42, Aug. 7; H. G. Wells, 79, Aug. 13; Joachim von Ribbentrop, 53, Oct. 16; James J. Walker, 65, Nov. 18; Damon Runyon, 62, Dec. 10; Walter Johnson, 59, Dec. 10; Eugene Talmadge, 62, Dec. 21; W. C. Fields, 66, Dec. 25.

1947 The United States grew tired of seeing small nations sucked into the Soviet orbit, so the Truman Doctrine was born to bolster Greece and Turkey against Communism. But this wasn't enough. By summer the Marshall Plan was born—a vast, four-year project by which the United States would pour out billions to put sixteen democracies of Western Europe back on their feet economically. Here at home we were harassed by the high cost of living. Eggs: \$1 a dozen; butter and steak: \$1 a pound. Income tax: still at war peak, and Truman vetoed cuts passed by Republican Congress. To top it all, Paris fashion designers told women to throw away their dresses and get the long-skirt New Look; meekly, they did.

Jan. 1 England nationalizes all coal mines.

U. S. transfers control of domestic atomic energy development from Army to civilian commission.

6 Lt. Gen. Lucius D. Clay appointed commander of U. S. forces in European theater; Lt. Gen. Geoffrey Keyes named chief of U. S. occupation forces in Austria.

7 Secretary of State Byrnes resigns; Gen. George Marshall succeeds him.

16 Vincent Auriol elected first President of Fourth French Republic.

17 Paul Ramadier, Socialist, named first Premier of new French constitutional government.

26 Grace Moore, 45, American opera star, and Prince Gustavus Adolphus of Sweden killed with 20 others in crash of Dutch plane at Copenhagen.

Feb. 5 Boleslaw Bierut elected President of Poland.

10 Peace treaties for Italy, Rumania, Bulgaria, Hungary and Finland are signed in Paris.

13 Security Council votes 10-0, U.S.S.R. abstaining, to set up new Commission on Conventional Armaments.

17 British capture 22nd shipload of Jewish refugees trying to smuggle themselves into Palestine; deport them to Cyprus.

20 Britain announces she will withdraw from India by June, 1948, regardless of whether India has established government by then.

26 Lewis W. Douglas named U. S. Ambassador to Britain.

28 France and England announce 50-year treaty of alliance; to be signed Mar. 4.

Mar. 2 Chinese Executive Yüan announces resignation of Premier T. V. Soong.

4 Russia rejects U. S. plan for control of atomic energy by U. N.

6 Supreme Court finds John L. Lewis guilty of contempt for failing to call off coal strike in November.

10 Big Four Council of Foreign Ministers begins Moscow meeting to draw up peace treaties for Italy and Germany.

12 Truman asks Congress for \$400 million to save Greece and Turkey from Communist expansionism.

31 Draft law expires; many war-time controls go off. Sugar rationing stays.

April 1 King George II of Greece dies of heart attack; his brother takes throne as Paul I.

2 Security Council approves U. S. trusteeship of former Japanese-mandated Pacific islands.

9 Senate confirms, 50-31, nomination of David E. Lillenthal and 4 other members of U. S. Atomic Energy Commission after 10-week fight.

14 General Motors settles wage dispute with United Electrical Workers (CIO) with 15-cent-an-hour wage increase setting pattern for industries.

16-18 Nitrate ship *Grandcamp* blows up at Texas City, Tex.; more than 500 killed; \$50 million damage.

May 4 Socialist Premier Paul Ramadier ejects Communists from French Cabinet.

15 U. N. General Assembly ends first special session after voting, 46-7, for 11-nation inquiry committee on Palestine.

21 All 28 defendants in South Carolina mass lynching trial acquitted, despite statements confessing participation.

23 U. N. Balkan Inquiry Commission finds Yugoslavia, Bulgaria and Albania blameworthy for aiding Greek guerrilla forces waging civil war.

26 Revolution in Nicaragua; Gen. Anastasio Somoza seizes power.

June 5 Marshall says U. S. may have to spend billions to put Europe on its feet economically (Marshall Plan).

11 U. S. ends sugar rationing, last of wartime controls.

- 16 Truman vetoes income tax reduction bill; House upholds veto next day.
 - 23 Senate enacts Taft-Hartley Bill curbing labor unions over Truman veto.
 - 27 Foreign Ministers of Britain, U.S.S.R. and France meet in Paris to discuss Marshall Plan.
- July 6 Generalissimo Franco holds plebiscite in Spain to ratify his dictatorship; wins by large margin.
- 8 Coal strike averted as United Mine Workers win biggest pay boost in history—44½ cents an hour.
 - 12 Paris conference on Marshall Plan to reconstruct Europe opens with 16 nations attending and 8 nations boycotting (at behest of Russia).
 - 20 Dutch troops launch offensive in Java against native Indonesian Republic.
 - 25 Congress passes bill to merge U. S. armed forces under single Secretary of Defense; Truman signs next day.
- Aug. 1 U. N. Security Council orders Dutch and Indonesians to cease hostilities in Java.
- 10 William P. Odom flies alone around world in fastest time ever—19,645 mi. in 73 hr., 5 min., 11 sec.
 - 11 Construction of first peacetime atomic-energy pile begins at Brookhaven, L. I., nuclear research center.
 - 15 Freedom comes to India, split into two states—India (mostly Hindu) and Pakistan (mostly Moslem).
 - 19 Two Soviet vetoes kill Security Council effort to resolve Balkan crisis involving Greece, Bulgaria, Yugoslavia and Albania.
 - 27 England cuts meat ration to 20 cents a person a week to keep from bankruptcy; bans all pleasure motoring after Oct. 1.
- Sept. 2 19 American nations sign treaty of Rio de Janeiro, promising to help each other put down aggression.
- 11 Food prices in U. S. reach new record high levels.
 - 15 Peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland go into effect at midnight.
 - 16 Second annual session of U. N. General Assembly opens at Flushing Meadow Park, New York City.
- 18 Deputy Foreign Minister Vishinsky of Russia accuses U. S. of instigating propaganda for third world war; asks U. N. to stop us.
 - 22 16 European nations complete in Paris their report on Marshall Plan; say Europe will need \$15.81 billion in credits from U. S. in next 4 years.
 - 27 Sen. J. Howard McGrath becomes chairman of Democratic National Committee, replacing Robert E. Hannegan.
- Oct. 5 Moscow announces formation of new Communist international organization, "Cominform," aimed at U. S. "imperialism." Truman calls for meatless Tuesdays, eggless and poultryless Thursdays to save grain for Europe.
- 9 U. S. reveals pilotless rocket plane attained speed of 1,600 ml. an hour.
 - 28 Congressional inquiry into Communism in Hollywood cites 10 screen writers for contempt for failing to say whether they are or ever were Communists.
- Nov. 2 Howard Hughes flies world's biggest plane, built for 500 passengers.
- 3 Stanislaw Mikolajczyk, leader of Poland's Peasant party, which opposed Communist domination, arrives in England by plane to avoid being "killed like a sheep."
 - 5 U. N. Assembly approves sending commission to Korea to set up free government; Russia boycotts it.
 - 17 Truman asks for power to revive price controls and rationing if necessary.
 - 20 Princess Elizabeth of England is married to Lt. Philip Mountbatten.
 - 29 U. N. Assembly approves partitioning of Palestine.
- DIED: Al Capone, 48, Jan. 25; Grace Moore, 45, Jan. 26; Adm. Marc A. Mitscher, 60, Feb. 3; Johnny Evers, 65, Mar. 28; Henry Ford, 83, Apr. 7; Benny Leonard, 51, Apr. 18; Christian X of Denmark, 76, Apr. 20; Lewis E. Lawes, 63, Apr. 23; Louise Homer, 76, May 6; Hal Chase, 64, May 18; Jimmie Lunceford, 45, July 13; Theodore G. Bilbo, 69, Aug. 21; Fiorello H. LaGuardia, 64, Sept. 20; Harry Carey, 69, Sept. 21; Dudley Digges, 68, Oct. 24; Ernst Lubitsch, 55, Nov. 30.

1948 A year of the jitters. The world shuddered when Soviet Russia gobbled up Czechoslovakia. The world was on tenterhooks when Russia blockaded the sectors of Berlin occupied by the U. S., Great Britain and France. What day would World War III break out? Whittaker Chambers opened a pumpkin, and out popped State Department secrets allegedly stolen for the Communists. The U. S. began rearming, drafting its youths into the Army. But we took time out on November 3 to give a great roar of laughter. Poor Harry Truman, shunned by many of his own Democrats, consigned to oblivion by all the pollsters and political pundits—poor Harry was just about the only man who thought he could be re-elected President—and *he was right!* Best-selling books of the year were: *Sexual Behavior in the Human Male*, which indicated that American males don't behave too well, and *How to Stop Worrying and Start Living*, the profits from which certainly must have eased any worries Dale Carnegie may have had.

- Jan.** 1 Britain nationalizes railways.
 2 India appeals to U. N. to stop "aggression" by Moslem Pakistan.
 5 U. N. Little Assembly meets for first time; boycotted by Russia, Poland, Yugoslavia, Czechoslovakia, the Ukraine and Byelorussia.
 6 France enacts forced loan to combat inflation.
 12 Truman budget submitted: \$39,668,993,983 for fiscal year ending June 30, 1949—\$2 billion increase over 1948 budget.
 U. S. Supreme Court orders Oklahoma to provide legal education for Negro girl.
 14 Truman economic report warns of recession unless inflation is halted.
 17 Dutch sign truce with Indonesian Republic in Java, retaining rich oil and rubber areas.
 28 Longest U. S. cold wave in 12 winters shuts schools and factories for lack of fuel oil.
 30 Gandhi is assassinated by Hindu fanatic who wanted war against Moslem Pakistan.
- Feb.** 4 Britain freezes wages to curb inflation.
 18 Eamon de Valera ousted as Prime Minister of Ireland after 16 years; John A. Costello elected.
 23 5 Southern governors, angry at Truman civil-rights program to aid Negroes, say "South is no longer 'in the bag' for Democratic party."
 Communists seize power in Czechoslovakia; President Eduard Beneš yields.

- 29 Navy FJ1, jet fighter plane, sets new speed record, flying 950 mi. from Seattle to Los Angeles in 1 hr., 58 min., 7 sec.
- Mar.** 2 Snowfall in New York City reaches total of 58.4 in., setting record since winter of 1892-93.
 6 Western Allies agree on international control of Germany's Ruhr.
 10 Jan Masaryk, 61, Foreign Minister of Czechoslovakia, plunges to death; Czech Communists say it was suicide.
 17 Truman asks Congress to revive draft to forestall Russian aggression.
 5 nations (Britain, France, Belgium, Netherlands, Luxemburg) sign 50-year treaty of alliance.
 24 Congress passes bill to cut income taxes by \$4.8 billion.
 30 Ninth International Conference of American States opens in Bogotá, Colombia.
 31 Russia imposes rigid controls on British, French and American traffic between Berlin and western zones; Western Allies halt their trains rather than submit.
- Apr.** 2 Congress passes global aid bill of \$6.098 billion, including European Recovery Program.
 13 Stassen wins Nebraska primary over Dewey and other Republicans.
 18-19 Communists beaten in Italian elections, winning only 31 per cent of vote. Christian Democratic party wins 49 per cent.
 19 Federal District Court convicts John Howard Lawson, film writer, of contempt of Congress for failing to say whether or not he was a Communist.
 20 Federal court fines John L. Lewis \$20,000 and United Mine Workers \$1,400,000 for criminal contempt in failing for one week to obey court order to call off strike. Assailant wounds Walter P. Reuther, President of United Automobile Workers, by firing through kitchen window.
 28 Marshall Field III sells controlling interest in his New York newspaper *PM* to Bartley C. Crum and Joseph Barnes.
- May** 14 British end mandate over Palestine; Jews proclaim new nation of Israel.
 16 Arab armies invade Palestine from both north and south.
 17 U. N. gives up attempt at international control of atomic power because of Russian opposition to majority views.
 25 General Motors grants 11-cent hourly wage increase to UAW;

wages to move up or down according to living costs.

June 3 World's largest telescope, 200-in. mirror, is dedicated on Palomar Mountain, Calif.

7 Eduard Beneš resigns as President of Czechoslovakia rather than sign new Communist constitution.

9 Truman says 80th Congress is worst in U. S. history.

11 Palestine war ceases for 4 weeks under U. N. truce.

17 Britain and France agree to set up separate state of West Germany under Western Allies' control.

19 Russia stops all rail and road traffic between Berlin and western German occupation zones; Americans, British and French isolated in city.

24 Thomas E. Dewey nominated by Republicans at Philadelphia for President; Earl Warren nominated for Vice President next day.

28 Communist Information Bureau (Cominform) denounces Marshal Tito, Yugoslav Premier.

July 1 Russians withdraw from Allied Kommandatura, 4-power government of Berlin.

5 Britain adopts National Health Service Act providing free medical service for everybody who requests it.

15 Truman and Alben W. Barkley nominated by Democrats for President and Vice President.

16 U. S. Steel abandons fight against inflation; raises wages 13 cents an hour and boosts prices.

17 Southern Democrats from 13 states nominate Gov. J. Strom Thurmond of S. C. for President, and Gov. Fielding L. Wright of Miss. for Vice President.

18 Arabs and Jews obey U. N. order to cease fire in Palestine under threat of penalties.

20 U. S. indicts 12 Communist party leaders on charges of advocating overthrow of U. S. government.

24 Progressive party nominates Henry Wallace and Glen H. Taylor for President and Vice President.

31 New York International Airport at Idlewild, Queens, dedicated; largest commercial airport in world.

Aug. 2 Senate filibuster kills bill to abolish poll tax in Southern states.

3 Whittaker Chambers, former Communist, says Communists maneuvered themselves into key U. S. government posts before war.

12 Mrs. Oksana Kasenkina, Russian teacher, jumps out of Soviet consulate in New York; says later she was "prisoner" there.

Sept. 6 Queen Wilhelmina of the Netherlands abdicates after reigning 50 years; Juliana becomes Queen.

15 U. S. sues to split "Big Four" meat packers into 14 independent companies.

17 Count Bernadotte, U. N. mediator in Palestine, slain in Jerusalem.

25 U. S. discloses jet-plane speed approaching 900 mi. an hour.

29 U. S., Britain and France ask U. N. to consider Berlin crisis as "threat to peace."

Oct. 9 Winston Churchill advocates bringing matters to a head with Russia now, before it gets atom bomb.

22 One-week renewal of Palestine warfare ends with Israel wresting control of Negeb from Egyptians.

25 Russia vetoes U. N. plea to lift Soviet blockade of Western Berlin.

26 5 European Western Union nations ask U. S. and Canada to join in North Atlantic military alliance.

30 First shipload of 813 DP's arrive in New York.

Nov. 1 Chinese Communists capture Mukden, giving them control of Manchuria.

2 Harry S. Truman and Alben W. Barkley elected; Democrats control both houses of Congress.

8 Rep. J. Parnell Thomas (N. J.) indicted on charges of conspiracy to defraud government by salary kick-backs.

12 Tojo and 6 other Japanese war leaders sentenced to hang.

14 Princess Elizabeth gives birth to 7 lb. 6 oz. son, who may someday be King of England.

Dec. 6 Whittaker Chambers says Alger Hiss supplied data for Communist spies.

19 Dutch troops seize Jogjakarta, capital of Indonesian Republic

23 Hideki Tojo and 6 other Japanese war leaders hanged in Tokyo.

DIED: Ermanno Wolf-Ferrari, 72, Jan. 21; Herb Pennock, 53, Jan. 30; Orville Wright, 76, Jan. 30; Burns Mantle, 74, Feb. 9; Sergei Eisenstein, 49, Feb. 10; Dame May Whitty, 82, May 29; Gen. John J. Pershing, 87, July 15; David Wark Griffith, 73, July 23; Babe Ruth, 53, Aug. 16; Charles E. Hughes, 86, Aug. 27; Charles A. Beard, 73, Sept. 1; Eduard Beneš, 64, Sept. 3; Mohammed Ali Jinnah, 71, Sept. 11; Rupert D'Oyly Carte, 71, Sept. 12; Emil Ludwig, 67, Sept. 17; Franz Lehar, 73, Oct. 24.

1949 Having chewed \$148 million worth of gum during 1948, the people of our great republic started off 1949 by seeking something for nothing in two ways: (1) by annexing the millions of dollars handed out free by radio give-away shows, and (2) by plunging into a craze called Pyramid Clubs. In the eyes of some, the biggest news of the year was that red-headed Rita Hayworth, of Hollywood, was married in May to Prince Aly Khan, heir to one of the world's largest fortunes. By summer, however, we had plunged into a full-blown Red scare: Communists in the schools, maybe—and Alger Hiss in the State Department. President Truman called it hysteria. And then in early autumn the President made a momentous 14-word announcement that changed the whole world picture: "We have evidence that within recent weeks an atomic explosion occurred in the U.S.S.R." We shivered at the thought that Russia had the atom bomb 3 years earlier than expected.

Jan. 1 India and Pakistan end war over Kashmir, accepting U. N. truce plan for plebiscite.

7 Sec. of State Marshall resigns; Dean Acheson appointed.

10 Truman presents \$41,858,000,000 budget for 1950 fiscal year; 34% is for defense.

20 Truman and Barkley take oath of office as President and Vice President.

21 Chiang Kai-shek retires from presidency of China.

25 Israel holds first elections; David Ben-Gurion's moderate Socialist party wins.

28 *The* (N. Y.) *Star*, formerly newspaper *PM*, ceases publication; out of funds.

Feb. 7 Canton becomes temporary capital of China as Communists menace Nanking.

8 Hungary sentences Josef Cardinal Mindszenty to life imprisonment for treason.

New 6-jet Boeing B-47 bomber crosses U. S. in 3 hr., 46 min. at average speed of 607 mph.

9 Robert Mitchum and Lila Leeds, both of the movies, sentenced to 60 days in jail for marijuana party.

17 Dr. Chaim Weizmann elected first President of Israel by Assembly.

22 Russia deports Anna Louise Strong, American writer, as spy.

Mar. 1 Joe Louis retires as undefeated heavyweight boxing champion.

2 Air Force B-50 Superfortress, *Lucky Lady II*, lands at Fort Worth, Tex., after circling globe nonstop—23,452 mi. in 94 hr., 1 min. Was refueled in air 4 times.

8 William P. Odum sets long-distance record for light land planes, flying 5,300 mi. nonstop from Honolulu to Teterboro, N. J., in 36 hr.

Bulgaria sentences 4 Protestant clergymen to life imprisonment as spies for U. S.

10 Mildred E. Gillars ("Axis Sally") found guilty of treason.

24 House, by 1 vote, kills bill to pension veterans of 65 at \$90 a month.

25 Cultural and Scientific Conference for World Peace opens in New York as pickets shout and pray against communism.

29 Largest bank theft in New York City history: \$883,660 missing, along with assistant branch manager of National City Bank.

April 2 Lights go on full in Britain, for first time in 10 years, as electricity becomes plentiful.

3 Israel and Jordan sign armistice, ending Palestine war.

4 12 nations sign North Atlantic defense treaty.

13 Earthquake kills 8 in Washington state; does \$15-million damage there and in Oregon.

14 Last Nuremberg war-crimes trial by American military tribunal sends 19 high Nazis to prison.

18 Erie becomes free republic of Ireland, cutting last tie with Britain.

23 U. S. Navy ordered to halt construction of 65,000-ton supercarrier after keel is laid; Sec. of Navy Sullivan resigns (April 26) in protest.

24 Chinese Communists capture Nanking.

May 5 First big strike in Ford plants since 1941 ties up production.

8 West Germans, at Bonn, approve constitution for federal republic.

10 Frank Hague's political machine in Jersey City, N. J., beaten at polls after 32-year rule.

11 U. N. admits Israel as 59th member.

12 Russia lifts land blockade of West Berlin; Western Allies lift their counterblockade.

22 James V. Forrestal, 57, former Sec. of Defense, leaps to death from 16th floor of Bethesda (Md.) Naval Hospital.

27 Rita Hayworth is married to Prince Aly Khan in Vallauris, Fr.

29 Longest Ford strike settled by agreement to arbitrate.

June 1 Czechoslovakia takes over control of Catholic Church.

13 Coal miners quit work for 1-week "stabilization period of inaction" at order of Lewis.

- 20 Council of Foreign Ministers adjourns without agreement on unifying Germany.
- 27 Liberal party, headed by Prime Minister Louis St. Laurent, wins Canadian elections.
- 30 Senate defeats Truman's drive to have Taft-Hartley Law repealed. Judith Coplon, former Department of Justice worker, convicted as spy.
- July 8 Alger Hiss perjury trial ends in hung jury: 8 for conviction, 4 for acquittal.
- 12 13 American news correspondents are among 45 killed in crash of Dutch plane at Bombay, India.
- 13 Pope Pius XII decrees excommunication for all Catholics who are aggressive Communists.
- 21 Senate ratifies North Atlantic Treaty without reservations by vote of 82-13.
- 23 Mrs. Franklin D. Roosevelt denies Cardinal Spellman's charge that she has "record of anti-Catholicism."
- Aug. 2 Congress passes bill to tighten unification of armed forces.
- 5 State Department White Paper abandons hope of saving China from communism.
- 8 12-nation Council of Europe holds first meeting in Strasbourg, Fr., to promote European unity.
- 14 West German republic elects first *Bundestag*; conservatives win over Socialists.
- 16 Otis Barton sets record by descending 4,500 ft. into Pacific off Santa Cruz Island, Calif., in "benthoscope."
- 18 Give-away radio shows banned by FCC after Oct. 1.
- Sept. 8 U. S. grants \$20-million loan to Tito to help Yugoslavia avoid Russian domination.
- 12 West German republic elects Theodor Heuss first President.
- 15 Konrad Adenauer elected Chancellor of West Germany.
- 18 Britain devalues pound sterling from \$4.03 to \$2.80.
- 22-month strike of Chicago newspaper printers ends with printers gaining very little.
- 21 Chinese Communists proclaim People's Republic of China, setting up government at Peiping.
- 23 Truman discloses that atomic explosion took place recently in U.S.S.R., meaning Russians have A-bomb secret.
- 29 "Tokyo Rose" (Mrs. Iva Ikuko Toguri D'Aquino) found guilty of treason for wartime broadcasts from Japan.
- Oct. 1 Nation-wide steel strike begins; issue is whether workers should pay part of pension costs.
- 5 Henri Queuille resigns in France after 1 year, 25 days as Premier.
- 11 Democratic Republican Government of East Germany elects Wilhelm Pieck, number-one Communist, as first President.
- 12 Joint Congressional Committee clears Atomic Energy Commission of charges of "incredible mismanagement."
- 14 11 top U. S. Communists found guilty of conspiring to advocate violent overthrow of U. S. government.
- 15 Chinese Communists capture Canton; Nationalist government flies to Chungking.
- 16 Greek rebels announce end of civil war.
- 24 Cornerstone laid for U. N. headquarters in New York City.
- Nov. 8 Democratic sweep in New York state elects Herbert H. Lehman to U. S. Senate by nearly 200,000 votes over John Foster Dulles; Mayor William O'Dwyer re-elected in New York City.
- 11 Steel strike ends with union victory: \$100-a-month company-paid pensions promised to workers 65 with 25-year service; also social insurance.
- 18 Vice President Barkley is married to Mrs. Carleton S. Hadley in St. Louis, Mo.
- 23 David Lilienthal resigns as chairman of Atomic Energy Commission.
- 30 Chinese Communists capture Chungking.
- DIED: Sir Malcolm Campbell, 63, Jan. 1; Willie Howard, 65, Jan. 12; Wallace Beery, 60, Apr. 15; Dr. Stephen S. Wise, 75, Apr. 19; Maurice Maeterlinck, 86, May 6; James Truslow Adams, 70, May 18; Robert L. Ripley, 55, May 27; Sigrid Undset, 67, June 10; Frank Murphy, 59, July 19; Margaret Mitchell, 49, Aug. 16; José C. Orozco, 65, Sept. 7; Richard Strauss, 85, Sept. 8; Wiley B. Rutledge, 55, Sept. 10; Frank Morgan, 59, Sept. 18; Richard Dix, 54, Sept. 20; Edward R. Stettinius, Jr., 49, Oct. 31; Marcel Cerdan, 33, Oct. 28; Bill Robinson, 71, Nov. 25.

AVIATION



Famous Firsts in Aviation

THOUGH man succeeded in making powered flight only 45 years ago, his dreams of flying go back to mythology.

The principle of jet propulsion, for example, was understood and put into design form some 2,000 years ago by Hero, an Alexandrian philosopher. And as far back as A.D. 1232 Genghis Khan's son, Ogdai, used rockets as a "secret weapon" in an attack on the Tartar city of Kaifeng. In 1480, Leonardo da Vinci drew sketches for what we now call helicopters.

Man's first aeronautical successes came in balloons.

- 1782—First balloon flight. Jacques and Joseph Montgolfier of Annonay, Fr., sent up a small smoke-filled balloon about mid-November.
- 1783—First hydrogen-filled balloon flight. Jacques A. C. Charles, Paris physicist, supervised construction by A. J. and M. N. Robert of a 13-ft. diameter balloon which was filled with hydrogen. It got up to about 3,000 ft. and traveled about 16 mi. in a 45-min. flight (Aug. 27).
- 1783—First human balloon flights. A Frenchman, Jean Pilâtre de Rozier, made the first captive balloon ascension (Oct. 15). With the Marquis d'Arlandes, Pilâtre de Rozier made the first free flight, reaching a peak altitude of about 500 ft., and traveling about 5½ mi. in 20 min. (Nov. 21).
- 1784—First powered balloon. Gen. Jean Baptiste Marie Meusnier developed the first propeller-driven and elliptically-shaped balloon—the crew cranking three propellers on a common shaft to give the craft a speed of about 3 mi. per hr.
- 1784—First woman to fly. Mme. Thible, a French opera singer (June 4).
- 1793—First balloon flight in America. Jean Pierre Blanchard, a French pilot, made it from Philadelphia to near Woodbury, Gloucester Co., N. J., in a little over 45 min. (Jan. 9).
- 1794—First military use of the balloon. Jean Marie Coutelle, using a balloon built for the French Army, made two 4 hr. observation ascents. The military value of the ascents seems to have been in damage to the enemy's morale.
- 1797—First parachute jump. André-Jacques Garnerin dropped from about 6,500 ft. over Monceau Park in Paris in a 23-ft. diameter chute made of white canvas with a basket attached (Oct. 22).
- 1843—First air transport company. In London, William S. Henson and John Stringfellow filed articles of incorporation for the Aerial Transit Company (Mar. 24). It failed.
- 1852—First dirigible. Henri Giffard, a French engineer, flew in a controllable (more or less) steam engine-powered balloon, 144 ft. long and 39 ft. in diameter, inflated with 88,000 cu. ft. of coal gas. It reached 6.7 mi. per hr. on a flight from Paris to Trappe (Sept. 24).
- 1860—First aerial photographers. Samuel Archer King and William Black made two photos of Boston, still in existence.
- 1872—First gas-engine powered dirigible. Paul Haenlein, a German engineer, flew in a semi-rigid frame dirigible, powered by a 4-cylinder internal combustion engine running on coal gas drawn from the supporting bag.
- 1873—First transatlantic attempt. *The New York Daily Graphic* sponsored the attempt with a 400,000 cu. ft. balloon carrying a lifeboat. A rip in the bag during inflation brought collapse of the balloon and the project.
- 1897—First successful metal dirigible. An all-metal dirigible, designed by David Schwarz, a Hungarian, took off from Berlin's Tempelhof Field and, powered by a 16-hp. Daimler engine, got several miles before leaking gas caused it to crash (Nov. 13).
- 1900—First Zeppelin flight. Germany's Count Ferdinand von Zeppelin flew the first of his long series of rigid-frame airships. It attained a speed of 18 mi. per hr. and got 3½ mi. before its steering gear failed (July 2).
- 1903—First successful heavier-than-air machine flight. Aviation was really born on the sand dunes at Kitty Hawk, N. C., when Orville Wright crawled to his prone position between the wings of the biplane he and his brother Wilbur had built, opened the throttle of their home-made 12-hp. engine and took to the air. He covered 120 ft. in 12 sec. Later that day, in one of four flights, Wilbur stayed up 59 sec. and covered 852 ft. (Dec. 17).
- 1904—First airplane maneuvers. Orville Wright made the first turn with an airplane (Sept. 15); 5 days later his brother Wilbur made the first complete circle.
- 1905—First airplane flight over half an hour. Orville Wright kept his craft up 33 min. 17 sec. (Oct. 4).

- 1906—First European airplane flight. Alberto Santos-Dumont, a Brazilian, flew a heavier-than-air machine at Bagatelle Field, Paris (Sept. 13).
- 1908—First airplane fatality. Lt. Thomas E. Selfridge, U. S. Army Signal Corps, was in a group of officers evaluating the Wright plane at Fort Myer, Va. He was up about 75 ft. with Orville Wright when the propeller hit a bracing wire and was broken, throwing the plane out of control, killing Selfridge and seriously injuring Wright (Sept. 17).
- 1910—First licensed woman pilot. Baroness Raymonde de la Roche of France, who learned to fly in 1909, received ticket No. 36 on March 8.
- 1910—First flight from shipboard. Eugene Ely took a Curtiss plane off from the deck of cruiser *Birmingham* at Hampton Roads, Va., and flew to Norfolk (Nov. 14). The following January he reversed the process, flying from Camp Selfridge to the deck of the battleship *Pennsylvania* in San Francisco Bay (Jan. 18).
- 1911—First U. S. woman pilot. Harriet Quimby, a magazine writer, who got ticket No. 37.
- 1913—First multi-engined aircraft. Built and flown by Igor Ivan Sikorsky while still in his native Russia.
- 1914—First aerial combat. In August, Allied and German pilots and observers started shooting at each other with pistols and rifles—with negligible results.
- 1915—First air raids on England. German Zeppelins started dropping bombs on four English communities (Jan. 19).
- 1918—First U. S. air squadron. The U. S. Army Air Corps made its first independent raids over enemy lines, in DH-4 planes (British-designed) powered with 400-hp. American-designed Liberty engines (Apr. 8).
- 1918—First regular airmail service. Operated for the Post Office Department by the Army, the first regular service was inaugurated with one round trip a day (except Sunday) between Washington, D. C., and New York City (May 15).
- 1919—First transatlantic flight. The NC-4, one of four Curtiss flying boats commanded by Lt. Comdr. Albert C. Read, reached Lisbon, Port. (May 27) after hops from Trepassy Bay, Nfd. to Horta, Azores (May 16-17), to Ponta Delgada (May 20). The Liberty-powered craft was piloted by Walter Hinton.
- 1919—First nonstop transatlantic flight. Capt. John Alcock and Lt. Arthur Whitten Brown, British World War I flyers, made the 1,900 mi. from St. John's, Nfd. to Clifden, Ire., in 16 hr. 12 min. in a Vickers-Vimy bomber with two 350-hp. Rolls-Royce engines (June 15-18).
- 1919—First lighter-than-air transatlantic flight. The British dirigible R-34, commanded by Maj. George H. Scott, left Firth of Forth, Scot. (July 2) and touched down at Mineola, L. I., 108 hr. later. The eastbound trip was made in 75 hr. (completed July 13).
- 1919—First scheduled passenger service (using airplanes). Aircraft Travel and Transport inaugurated London-Paris service (Aug. 25). Later the company started the first trans-channel mail service on the same route (Nov. 10).
- 1921—First naval vessel sunk by aircraft. Two battleships being scrapped by treaty were sunk by bombs dropped from Army planes in demonstration put on by Brig. Gen. William S. Mitchell (July 21).
- 1921—First helium balloon. The C-7, non-rigid Navy dirigible was first to use non-inflammable helium as lifting gas, making a flight from Hampton Roads, Va., to Washington, D. C. (Dec. 1).
- 1922—First member of Caterpillar Club. Lt. (later Maj. Gen.) Harold Harris bailed out of a crippled plane he was testing at McCook Field, Dayton, Ohio (Oct. 20), and became the first man to join the Caterpillar Club—those whose lives have been saved by parachute.
- 1923—First nonstop transcontinental flight. Lts. John A. Macready and Oakley Kelly flew a single-engine Fokker T-2 nonstop from New York to San Diego, a distance of just over 2,500 mi. in 26 hr. 50 min. (May 2-3).
- 1923—First autogyro flights. Juan de la Cierva, brilliant Spanish mathematician, made the first successful flight in a rotary wing aircraft in Madrid (June 9).
- 1924—First round-the-world flight. Four Douglas Cruiser biplanes of the U. S. Army Air Corps took off from Seattle under command of Maj. Frederick Martin (Apr. 6). 175 days later two of the planes (Lt. Lowell Smith's and Lt. Erik Nelson's) landed in Seattle after a circuitous route—one source saying 26,345 mi., another saying 27,553 mi.
- 1926—First polar flight. Then-Lt. Cmdr. Richard E. Byrd, acting as navigator, and Floyd Bennett as pilot, flew a trimotor Fokker from Kings Bay, Spitsbergen, over the North Pole and back in 15½-hr. flight (May 8-9).
- 1927—First solo transatlantic flight. Charles Augustus Lindbergh lifted his Wright-powered Ryan monoplane, *Spirit of St. Louis*, from Roosevelt Field, L. I., to stay aloft 33 hr. 39 min. and cover 3,600 mi. to Le Bourget Field outside Paris (May 20-21).
- 1927—First transatlantic passenger. Charles A. Levine was piloted by Clarence D. Chamberlin from Roosevelt Field, L. I., to Eisleben, Ger., in a Wright-powered Bellanca (June 4-5).

- 1928—First east-west transatlantic crossing. Baron Guenther von Huenefeld, piloted by German Capt. Hermann Koehl and Irish Capt. James Fitzmaurice, left Dublin for New York City (Apr. 12) in a single-engine all-metal Junkers monoplane. Some 37 hr. later they cracked up on Greenly Island, Labrador. They were rescued.
- 1928—First U. S.-Australia flight. Sir Charles Kingsford-Smith and Capt. Charles T. P. Ulm, Australians, and two American navigators, Harry W. Lyon and James Warner, crossed the Pacific from Oakland to Brisbane. They went via Hawaii and the Fiji Islands in a trimotor Fokker (May 31-June 8).
- 1928—First trans-Arctic flight. Sir Hubert Wilkins, Australian explorer, piloted by Carl Ben Eielson, flew from Point Barrow, Alaska, to Spitsbergen (mid-April).
- 1929—First of the endurance records. With Air Corps Maj. Carl Spaatz in command and Capt. Ira Eaker as chief pilot, an Army Fokker, aided by refueling in the air, remained aloft 150 hr. 40 min. at Los Angeles (Jan. 1-7).
- 1929—First blind flight. James H. Doolittle proved the feasibility of instrument flying when he took off and landed entirely on instruments (Sept. 24).
- 1929—First rocket engine flight. Fritz von Opel, German auto maker, stayed aloft in his small rocket-powered craft for 75 sec., covering nearly 2 mi. (Sept. 30).
- 1929—First South Pole flight. Comdr. Richard E. Byrd, with Bernt Balchen as pilot, Harold I. June, radio operator, and Capt. A. C. McKinley, photographer, flew a trimotor Fokker from the Bay of Whales, Little America, over the South Pole and back (Nov. 28-29).
- 1930—First Paris-New York nonstop flight. Dieudonné Coste and Maurice Bellonte, French pilots, flew a Hispano-powered Breguet biplane from Le Bourget Field to Valley Stream, L. I., in 37 hr. 18 min. (Sept. 2-3).
- 1931—First flight into the stratosphere. Prof. Auguste Piccard, Swiss physicist, and Charles Knipfer, ascended in a balloon from Augsburg, Ger., and reached a height of 51,793 ft. in a 17-hr. flight that terminated on a glacier near Innsbruck, Aus. (May 27).
- 1931—First nonstop transpacific flight. Hugh Herndon and Clyde Pangborn took off from Sabishiro Beach, Japan, dropped their landing gear and flew 4,860 mi. to near Wenatchee, Wash., in 41 hr. 13 min. (Oct. 4-5).
- 1932—First woman's transatlantic solo. Amelia Earhart, flying a Pratt & Whitney Wasp-powered Lockheed Vega, flew alone from Harbor Grace, Nfld., to Ireland in approximately 15 hr. (May 20-21).
- 1932—First westbound transatlantic solo. James A. Mollison, British pilot, took a de Havilland Puss Moth from Portmarnock, Ire., to Pennfield, N. B. (Aug. 18).
- 1932—First woman airline pilot. Ruth Rowland Nichols, first woman to hold three international records at the same time—speed, distance, altitude—was employed by the N. Y.-New England Airways.
- 1933—First round-the-world solo. Wiley Post took a Lockheed Vega, *Winnie Mae*, 15,596 mi. around the world in 7 days 18 hr. 49½ min. (July 15-22).
- 1937—First successful helicopter. Hanna Reitsch, German woman pilot, flew Dr. Heinrich Focke's FW-61 in free, fully-controlled flight at Bremen (July 4).
- 1939—First turbojet flight. Just before their invasion of Poland, the Germans flew a Heinkel He-178 plane powered by a Heinkel S3B turbojet (Aug. 27).
- 1942—First American jet plane flight. Robert Stanley, chief pilot for Bell Aircraft Corp., flew the Bell XP-59 *Airacomet* at Muroc Army Base, Calif. (Oct. 1).
- 1947—First piloted supersonic flight in an airplane. Capt. Charles E. Yeager, U. S. Air Force, flew the X-1, rocket-powered research plane built by Bell Aircraft Corp., faster than the speed of sound at Muroc Air Force Base, Calif. (Oct. 14).
- 1948—First round-the-world nonstop flight. Capt. James Gallagher and USAF crew of 13 flew a Boeing B-50A Superfortress around the world nonstop from Ft. Worth, Tex., returning to same point, 23,452 miles, in 94 hr., 1 min., with 4 aerial refuelings enroute (Feb. 27-28, Mar. 1-2).

A Few Current Aviation Terms

Athodyd—a form of ramjet, the term coming from Aero-Thermo-Dynamic Duct.

Axial flow compressor—one that compresses air in a flow parallel to the axis of rotation through a series (or multiple stages) of compressor blades.

Centrifugal compressor—one that compresses air in a direction tangential to the rotating member (or impeller). sometimes likened to a cream separator set on its side.

Critical speed—that at which compressibility effects begin to be encountered. Most propeller-driven aircraft don't reach critical speed in level flight (because of lack of power) but can hit it in dives. Many jet-propelled planes, however, can reach it in level flight.

Supersonic speed—that which is faster than the speed of sound.

Helicopter Records

Source: National Aeronautic Association.

DISTANCE, AIRLINE

International and U. S.: 703.6 miles
 Maj. F. T. Caschman, pilot, Maj. W. E. Zins, copilot, (US), Sikorsky R-5, powered by 450-hp. Pratt & Whitney, from Dayton, O. to Logan Field, Boston, Mass. May 22, '46.

DISTANCE, CLOSED CIRCUIT

International and U. S.: 621.369 miles
 Maj. D. H. Jensen & Maj. W. C. Dodds, (US), Sikorsky R-5A, powered by 450-hp. Pratt & Whitney, Dayton, O. Nov. 14, '46.

ALTITUDE

International and U. S.: 21,220 feet
 Capt. H. D. Gaddis (US), Sikorsky S-52-1, powered by 245 hp. Franklin; Bridgeport, Conn., May 21, 1949.

MAXIMUM SPEED

International and U. S.: 129.552 mph.
 Harold E. Thompson (US), Sikorsky S-52-1, powered by 245 hp. Franklin; Cleveland, Ohio, April 27, 1949.

SPEED FOR 100 K.M. (CLOSED COURSE)

International and U. S.: 122.749 mph.
 Harold E. Thompson (US), Sikorsky S-52-1, powered by 245 hp. Franklin; Milford, Conn., May 6, 1949.

SPEED FOR 1,000 KILOMETERS IN A CLOSED CIRCUIT (625 MILES)

International and U. S.: 107.251 km. ph. (66.642 mph.)
 Maj. D. H. Jensen & Maj. W. C. Dodds, (US), Sikorsky R-5A, powered by 450-hp. Pratt & Whitney, Dayton, O., Nov. 14, '46.

Certificated U. S. Airplane Pilots

Source: Civil Aeronautics Administration.

Year	Total	Airline transport	Commercial	Private
1937.....	17,681	1,064	6,411	10,206
1938.....	22,983	1,159	7,839	13,985
1939.....	33,706	1,197	11,677	20,832
1940.....	69,829	1,431	18,791	49,607
1941.....	129,947	1,587	34,578	93,782
1942.....	166,626	2,177	55,760	108,689
1943.....	173,206	2,315	63,940	106,951
1944.....	183,383	3,046	68,449	111,888
1945.....	296,895	5,815	162,873	128,207
1946.....	400,061	7,654	203,251	189,156
1947.....	433,241 ¹	7,059 ²	181,912 ²	244,270 ²
1948.....	491,306 ²	7,762 ²	176,845 ²	306,699 ²

¹ As of April 1, 1948. ² As of May 1, 1949.

U. S. Scheduled Airlines, 1949

Source: Civil Aeronautics Administration.

Airline	Certificated route mileage	Revenue passenger miles, 1949
Domestic (Trunk)		
American.....	18,476	1,508,058,000
Braniff.....	4,831	199,628,000
Capital.....	5,810	361,700,000
Chicago & Southern.....	6,119	107,438,000
Colonial.....	1,382	50,366,000
Continental.....	3,800	66,809,000
Delta.....	7,349	209,757,000
Eastern.....	13,202	1,007,626,000
Inland.....	1,913	31,349,000
Mid-Continent.....	4,474	100,239,000
National.....	2,702	169,025,000
Northeast.....	2,182	62,278,000
Northwest.....	11,130	421,578,000
Trans World (TWA).....	11,582	938,702,000
United.....	15,881	1,275,218,000
Western.....	3,103	124,386,000
Total.....	115,486	6,634,157,000
Domestic (Feeder)		
All American.....	3,395	9,860,000
Arizona.....	1,020	*
Bonanza.....	664	82,000
Central.....	1,347	100,000
Challenger.....	2,394	8,343,000
Empire.....	754	7,573,000
Mid-West.....	1,280	73,000
Monarch.....	1,683	7,805,000
Parks.....	2,785	*
Piedmont.....	1,904	18,580,000
Pioneer.....	2,181	29,216,000
Robinson.....	561	6,274,000
Southern.....	1,332	1,753,000
Southwest.....	1,272	21,239,000
Trans-Texas.....	2,061	11,618,000
Turner.....	661	109,000
West Coast.....	885	8,716,000
Wiggins, E. W.....	633	43,000
Wisconsin Central.....	1,712	4,943,000
Total.....	28,524	136,736,000
International		
American.....	1,550	64,805,000
American Overseas.....	9,134	185,012,000
Braniff.....	7,597	29,020,000
Chicago & Southern.....	3,270	27,327,000
Colonial.....	2,030	9,943,000
Eastern.....	1,957	16,039,000
National.....	445	16,664,000
Northwest.....	18,713	75,365,000
Pan American World.....	127,930	1,190,007,000
Pan American-Grace.....	10,653	105,969,000
Trans World (TWA).....	23,317	288,159,000
United.....	2,400	64,440,000
Western.....	1,640	*
Total.....	209,086	2,072,750,000

* Had not yet begun operations.

Important American Aircraft Types

Manufacturer*	Name or model no.	Seats	No. and make engine	Engine hp.	High speed	Cruising speed	Gross weight	Span ft. in.	Length ft. in.
Executive, Transport									
Beech A. Corp.	D-18S	4-10	2 P & W R-985	450	256	205	8,500	47 7	33 11½
Boeing Airplane Co.	Stratocruiser	57-92	4 P & W R-4360	3,500	351	312	142,500	141 3	110 4
Consolidated Vultee A. Corp.	Convair-Liner	36-42	2 P & W R-2800	2,100	320	285	39,000	91 9	74 8
Douglas A. C.	DC-3	30	2 P & W SC36	1,050	257	211	25,200	95 0	64 5½
	DC-4	48-58	4 P & W R-2000	1,450	300	250	73,000	117 6	93 5
	DC-6	48-66	4 P & W R-2800	2,400	360	311	97,200	117 6	100 7
Lockheed A. Corp.	Constellation	34-64	4 Wright R-3350	2,500	354	300	107,000	123 0	95 3
G. L. Martin Co.	2-0-2	36-40	2 P & W R-2800	2,400	312	286	42,750	93 3¾	71 4
Personal									
Aeronca A. Corp.	Sedan	4	1 Continental	145	129	114	2,050	37 6	25 3
	Champion	2	1 Continental	90	110	100	1,300	35 2	21 6
Beech A. Corp.	Bonanza	4	1 Continental	185	184	170	2,650	32 10	25 2
Cessna A. C.	140	2	1 Continental	90	125+	105+	1,500	33 4	21 6
	170	4	1 Continental	145	140+	120+	2,200	36 0	25 0
Engrg. & Research Corp.	Ercoupe	2	1 Continental	85	120	110	1,400	30 0	20 9
Piper Stinson A. Corp.	Cub PA-11	2	1 Continental	90	112	100	1,220	35 3	22 4
	Clipper	4	1 Continental	115	125	112	1,650	29 3	20 1
	Piper-Stinson	4	1 Franklin	165	133	130	2,400	34 0	25 2
Ryan Aero. Co.	Navion	4	1 Continental	205	163	155	2,750	33 4½	27 3
Texas Engrg. Mfg. Co.	Swift 125	2	1 Continental	125	150	140	1,710	29 2	20 11
	Silvaire 8F	2	1 Continental	90	128	115	1,400	35 0	20 0
	Silvaire Sedan	4	1 Continental	165	140+	130	2,280	38 0	23 6
Helicopters									
Bell A. Corp.	47-D	2	1 Franklin	178	92	85	2,200	35 2	41 2
Sikorsky A. Div.	S-51	4	1 P & W R-984	450	103	85	5,500	49 0	57 1

* A. C.—Aircraft Company; A. Corp.—Aircraft Corporation; A. Div.—Aircraft Division.

America's Warplane Production Record

Source: Civil Aeronautics Administration.

Type	1940	1941	1942	1943	1944	1945	Total 1940-45
Total	6,019	19,433	47,836	85,898	96,318	47,714	303,218
Bombers	1,191	4,115	12,627	29,355	35,003	16,492	98,783
Fighters	1,685	4,416	10,769	23,988	38,873	21,696	101,427
Photographic and reconnaissance	121	727	1,468	734	259	531	3,840
Transport	290	532	1,984	7,012	9,834	4,629	24,281
Trainer	2,731	9,373	17,631	19,939	7,577	1,309	58,560
Other*	1	270	3,357	4,870	4,772	3,057	16,327

* Includes special purpose, rotary wing, and liaison aircraft.

Types of Airline Accidents by Percentages

Type	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Landing	43	58	52	45	29	21	36	48	48	47	50
Take-off (including taxi)	30	21	12	23	25	38	26	16	9	24	20
Collision	3	11	18	16	8	17	21	18	9	30*	40*
Forced landing	6	5	3	0	17	0	5	9	17	11	0
Spin or stall	0	0	6	0	0	3	0	0	0	2	8
Other	18	5	9	16	21	21	12	9	17	0	24

* Collision accidents duplicate some in other categories.

Important American Aircraft Types (U. S. Air Force)

Manufacturer ¹	Model	Seats	No. of engines and make	Engine hp. or thrust	Top speed, m.p.h.	Cruising speed, m.p.h.	Gross weight, lb.	Span ft. in.	Length ft. in.
EXPERIMENTAL²									
Bell A. Corp.....	X-1	1	1 Reaction	6,000 lb.	760+	...	13,069	28 0	31 0
Chase A. Co., Inc.....	XC-123	62	2 P & W R-2800	2,100 hp.	225	200	25,000	110 0	77 0
Consolidated Vultee A. Corp.....	XF-92	1	1 AL J-33	5,200 lb.	(³)	...	30,000	31 0	41 0
	XC-99	400	6 P & W R-4360	3,000 hp.	300+	...	295,000	230 0	182 6
Fairchild E. & Ap. Corp.....	XC-120	Cargo	2 P & W R-4360	3,500 hp.	250	...	64,000	109 0	85 0
Hughes A. Co.....	XH-174	Cargo	2 GE J-35	4,000 lb.	...	...	...	...	...
Lockheed A. Corp.....	XF-90	1	2 WE J-34	4,000 lb.	(³)	...	30,000	40 0	56 0
Glenn L. Martin Co.....	XB-51	2	3 GE J-47	5,200 lb.	(³)	...	...	55 0	80 0
McDonnell A. Corp.....	XF-88	1	2 WE J-34	4,000 lb.	(³)	...	30,000	40 0	55 0
North American Av., Inc.....	YF-93	1	1 P & W J-48	6,250 lb.	(³)	...	...	39 0	44 0
Northrop A. Co.....	X-4	1	2 gas turbines	.....	(³)	...	7,000	25 0	20 0
Republic Av. Corp.....	XF-91	1	1 GE J-47	5,200 lb.	(³)	...	30,000	30 0	45 0
OPERATIONAL									
Beech A. Corp.....	C-45	5	2 P & W R-985	450 hp.	225	160	8,600	47 8	34 3
Boeing Ap. Co.....	C-97	136	4 P & W R-4360	3,500 hp.	375	...	164,000	141 4	110 4
	B-29	11	4 W R-3350	2,200 hp.	350+	...	140,000	141 3	99 0
	B-47	3	6 GE J-47	5,200 lb.	600	...	185,000	116 0	107 6
	B-50	11	4 P & W R-4360	3,500 hp.	400+	...	170,000	141 3	99 0
Consolidated Vultee A. Corp.....	B-36	15	6 P & W R-4360, 4 GE J-47	3,500 hp., 5,200 lb.	435+	...	358,000	230 0	162 6
Douglas A. Co.....	T-29	14	2 P & W R-2800	2,400 hp.	300+	...	40,000+	91 9	74 8
	C-54	49	4 P & W R-2000	1,450 hp.	300	...	82,500	117 6	93 5
	C-74	125	4 P & W R-4360	3,000 hp.	300	...	145,000	173 3	124 2
	C-124	222	4 P & W R-4360	3,500 hp.	300	...	200,000	173 4	127 3
	B-26	3	2 P & W R-2800	2,085 hp.	350+	...	39,500	70 0	50 10
Fairchild E. & Ap. Corp.....	C-82	42	2 P & W R-2800	2,000 hp.	250	185	42,000	106 5	77 1
	C-119	64	2 P & W R-4360	3,250 hp.	250	...	74,000	109 4	85 9
Grumman A. Engr. Corp.....	SA-16	16	2 W R-1820	1,425 hp.	275+	...	28,000	80 0	60 8
Lockheed A. Corp.....	F-80	1	1 AL J-33	5,200 lb.	600	...	15,000	39 0	34 6
	F-94	1	1 AL J-33	5,200 lb.	600	...	15,000	38 11	40 1
	C-121	44	4 W R-3350	2,500 hp.	350	...	135,000	123 0	95 4
	T-33	2	1 AL J-33	5,200 lb.	600	...	14,000	39 0	37 8
North American Av., Inc....	F-51	1	1 P V-1650	1,335 hp.	470	...	11,000	37 0	33 4
	F-82	2	2 AL V-1710	1,550 hp.	400+	...	26,000	51 6	39 5
	F-86	1	1 GE J-47	5,200 lb.	650	...	16,000	37 0	37 6
	T-6	2	1 P & W R-1350	600 hp.	210	...	5,300	42 0	29 0
	T-28	2	1 W R-1300	800 hp.	280+	...	6,000	40 2	32 6
	B-45	4	4 GE J-47	5,200 lb.	550	...	110,000	89 0	75 0
Northrop A. Co.....	F-89	2	2 AL J-35	4,000 lb.	600	...	40,000	50 0	50 0
	C-125	Cargo	3 736C9HD	1,425 hp.	225	...	46,000	87 0	67 2
Piasecki Helicopter Corp....	H-21	20	1 W R-1820	1,425 hp.	...	...	10,113	44 0	54 0
Republic Av. Corp.....	F-84	1	1 AL J-35	4,000 lb.	600	...	16,000	36 5	37 3
United A. Corp.....	H-5	3	1 P & W R-985	450 hp.	105	...	5,300	43 0	57 0
Sikorsky A. Corp. Div.....	H-19	10	1 P & W R-1340	600 hp.	100+	85	7,009	49 0	39 6

¹ A—Aircraft; Ap—Airplane; Av—Aviation; E—Engine. ² Additional models: X-2 (Bell), research aircraft, now under construction, to explore problems of transonic and supersonic flight; XB-52 (Boeing), heavy jet bomber now being developed; X-3 (Douglas), study to develop design capable of speeds 3 times speed of sound, and ceiling of from 200,000 to 300,000 ft. ³ High subsonic. ⁴ Experimental jet helicopter. ⁵ High speed. **ENGINE SYMBOLS:** AL—Allison; GE—General Electric; P—Packard; P&W—Pratt & Whitney; W—Wright; WE—Western Electric. **NOTE:** Power of propellerless turbojets and rocket engines is measured directly in the pounds of thrust exerted by their burnt gases forced out of the tailpipe. Turbine-propeller powerplants, however, use conventional horsepower measurement. Jet and rocket power increases with speed. Thus at 375 mph, one pound of thrust equals one horsepower, but at 750 mph, one thrust pound does the work of two horsepower.

Peacetime Production Record

Year	Military	Personal	Transport	Total
1946.....	1,643 ¹	34,407 ¹	457 ¹	36,644
1947.....	2,100 ¹	15,339 ¹	278 ¹	17,717
1948.....	(²)	7,039 ¹	263 ¹	(²)
1949.....	(²)	3,379 ¹	166 ¹	(²)

¹ Source: Census Bureau M24A Reports. ² Source: Statistical Control Division of Air Comptroller, Dept. of Air Force. ³ Not for publication.

International Airplane Records

Source: National Aeronautic Association.

(over 3-kilometer—1.864 mi. course)

Speed (mph)	Date	Type plane	Pilot	Place
266.583	Nov. 4, '23		Lt. Williams (U.S.A.)	Mineola
278.480	Dec. 11, '24		Adj. Bonnet (France)	Istres
294.380	Sept. 3, '32		Maj. J. H. Doolittle (U. S. A.)	Cleveland
304.980	Sept. 4, '33	Wedell-Williams	James R. Wedell (U.S.A.)	Chicago
314.320	Dec. 25, '34		Raymond Delmotte (France)	Istres
352.388	Sept. 13, '35	Hughes	Howard Hughes (U.S.A.)	Santa Anna
379.626	Nov. 11, '37		Herman Wunster (Germany)	Augsburg
469.220	Apr. 26, '39		Fritz Wendell (Germany)	Augsburg
606.255	Nov. 7, '45	Gloster Meteor IV	Gp. Capt. H. Wilson (Gr. Britain)	Herne Bay
616.	Sept. 7, '46	Gloster Meteor Jet propelled	Gp. Capt. E. M. Donalson (Gr. Britain)	Sussex Coast
623.738	June 19, '47	Lockheed P-80R	Col. Albert Boyd (U.S.A.)	Muroc AF, Calif.
640.7	Aug. 20, '47	Douglas D-558	Comdr. T. F. Caldwell, Jr. (U.S.A.)	Muroc AF, Calif.
650.6	Aug. 25, '47	Douglas D-558	Maj. Marion Carl, USMC (U.S.A.)	Muroc AF, Calif.
670.9	Sept. 15, '48	North American F-86A	Maj. R. L. Johnson (U.S.A.F.)	Muroc AF, Calif.

(Fastest U. S. transcontinental—Col. W. H. Council, Lockheed P-80, from Long Beach, Calif. to La Guardia Field, N. Y.—2,453.8 mi., in 4 hr., 13 min., 26 sec., average speed 580.9 mph.—Jan. 26, '46.) (This record unofficially broken by Maj. R. E. Schlech and Maj. J. W. Howell in Boeing XB-47, from Seattle, Wash., to Andrews Field, Md., 2,289 mi., in 3 hr. 46 min., average speed 607 mph., Feb. 8, 1949.)

Distance

Distance (mi.)	Date	Crew	From	To
3,352.91	Oct. 28-29, '26	Costes & Capt. Rignot (France)	Le Bourget	Jask
3,910.90	June 4-6, '27	Clarence D. Chamberlin, A. Levine (U.S.A.)	New York	Eisleben, Germany
4,466.57	July 3-5, '28	A. Ferrarin, Del Prete (Italy)	Rome	Touros
4,911.93	Sept. 27-29, '29	Costes & Bellonte (France)	Le Bourget	Moulant
5,011.35	July 28-30, '31	Russel N. Boardman, John Polando (U.S.A.)	New York	Istanbul
5,656.95	Aug. 5-7, '33	Rossi, Codos (France)	New York	Ryack
6,305.66	July 12-14, '37	Col. M. Gromov, Youmachew, Daniline (U.S.S.R.)	Moscow	San Jacinto, Calif.
7,158.44	Nov. 5-7, '38	Sqd. Ldr. R. Kallett (Gr. Britain)	Ismalia (Suez)	Darwin
7,916	Nov. 19-20, '45	Col. C. S. Irvine, pilot, Lt. Col. G. R. Stanley, copilot (U.S.A.)	Guam	Washington, D. C.
11,235.6	Sept. 29-Oct. 1, '46	Comdr. Thomas D. Davies, Comdrs. Eugene P. Ranklin, Walter S. Reid, Lt. Comdr. Ray A. Tabeing (U.S.A.)	Perth, Australia	Columbus, Ohio

(Longest light airplane distance and longest solo, international—William P. Odom, U. S. Beech Bonanza (185 hp.) from Honolulu, Hawaii to Teterboro, N. J., 4,957.24 mi., March 8-9, 1949.)

Distance (Closed Course)

Distance (mi.)	Date	Crew	Place
2,895.970	Aug. 3, '27	Edzard & Ristics (Germany)	Dessau
4,763.700	May 31—June 2, '28	Capt. Ferrarin & Del Prete (Italy)	Casal e del Paati
4,988.969	Dec. 15-17 '30	Costos & Codos (France)	Istres
5,088.275	May 31—June 2, '30	U. Maddalena & F. Ceconci (Italy)	Montecello
6,444.881	June 7-10, '31	J. LeBrix & M. Doret (France)	Istres
6,587.442	Mar. 23-26, '32	Bossoutrot & Rossi (France)	Oran
7,239.588	May 13-15, '38	Comm. Fujita & Sgt. Maj. Takahashi (Japan)	Kisarazu
8,037.899	July 30—Aug. 1, '39	Angelo Tondi, Ferruccio Viquoli, pilots, Aldo Stagliano, mech. (Italy)	Rome
8,854.308	Aug. 1-3, '47	Lt. Col. O. F. Lassiter, pilot (U.S.) Capt. W. J. Valentine, copilot (U.S.)	United States

Altitude

Height (feet)	Date	Crew	Place
38,419	July 25, '37	Lt. C. C. Champion (U.S.A.)	Washington
41,795	May 26, '29	Willi Neuenhofen (Germany)	Dessau
43,166	June 4, '30	Lt. Apollo Soucek (U.S.A.)	Washington
43,976	Sept. 16, '32	Capt. Cyril F. Uwins (Gr. Britain)	Filton, Bristol
44,819	Sept. 28, '33	G. Lemoine (France)	Villacoublay
47,352	April 11, '34	Com. Renato Donati (Italy)	Rome
49,994	Sept. 28, '36	Sqd. Ldr. S. R. D. Swain (Gr. Britain)	South Farnborough
53,937	June 30, '37	Fl. Lt. M. J. Adam (Britain)	Farnborough
56,046	Oct. 22, '38	Col. Mario Pezzi (Italy)	Montecello
59,445	Mar. 23, '48	John Cunningham (Gr. Britain)	England

Absolute Altitude—72,394.795 ft. Capts. Orvil Anderson & Albert Stevens, U. S., Nov. 11, 1935, from Rapid City, S. D., in balloon.

U. S. Airplane Record—47,910 ft. Maj. F. F. Ross, pilot, Lt. D. M. Davis, copilot, Lts. L. B. Barrier, C. B. Webster, F/O P. Morrisett, Sgt. W. S. George, Harmon Field, Guam, May 15, 1946, Boeing B-29.

THE UNITED NATIONS



THE PAST YEAR

by MARCUS DUFFIELD

In 1950, the United Nations went through the most turbulent year of its young life.

For over half a year (Jan. 13-Aug. 1), the Soviet Union boycotted the U. N. This period was later described by Trygve Lie, Secretary General, as one of "total stalemate," but his pessimistic words referred only to lack of progress toward abating the tension between Russia and the West. The U. N. itself did not yield to "total stalemate" but continued to perform such of its functions as it could in the absence of the Soviet bloc of nations.

Late in June, the Communist government of North Korea launched an invasion of South Korea. The U. N., in the continued absence of Soviet Russia, sprang into action and, for the first time since its birth in 1945, resorted to military sanctions to enforce its orders. It went to war in Korea in a desperate effort to preserve world peace by making the authority of the U. N. prevail.

The old League of Nations never reached that height of boldness, and it died. The general feeling in the U. N. when the Korean crisis arose was that this new world organization would also have died had it lacked the courage to authorize military action against aggression.

On the other hand, the bold action taken by the U. N. involved two grave perils. One was the risk of provoking World War III. The other was the risk of changing completely the character of the U. N.—changing it from a world organization into a coalition of nations opposing the Soviet Union.

THE RUSSIAN BOYCOTT

In December, 1949, the Chinese Communist forces, under the leadership of Mao Tse-tung, completed the conquest of substantially all of mainland China. The Nationalist government, led by Generalissimo Chiang Kai-shek, took refuge on the island of Formosa, 100 miles off the coast.

On Dec. 8, 1949, the U. N. General Assembly passed by a large majority a resolution calling upon all nations to respect the political independence of China and to be guided by the principles of the U. N. in their relations with China. The Interim Committee (Little Assembly) was directed to study the charges by Nationalist China

that the Soviet Union had aided the Communists in their conquest.

Early in January, the Soviet Union demanded that the Security Council unseat the delegate from Nationalist China on the ground that he did not represent the existing government of his nation. Russia also demanded that the Chinese Communist regime be admitted to membership on the Security Council as the true government of China. The Council refused that request by a vote of 6 to 3, with Norway and Britain (which had extended diplomatic recognition to the Chinese Communists) abstaining. India and Yugoslavia voted with Russia. The chief Soviet delegate walked out of the Council meeting on Jan. 12, and the Soviet boycott of the U. N. is commonly dated from the following day.

The boycott was rapidly extended. Whenever there was a meeting of a U. N. body in which both the Soviet Union and Nationalist China were represented, Russia immediately asked that the Chinese representative be evicted. Invariably the demand was rejected, and the Russians walked out. By the end of July, the Soviet Union was absenting itself from 33 U. N. agencies, which, including the Security Council, continued their meetings and accomplished some work. But the atmosphere was depressed, and there was a lack of zest for the work in view of the absence of so large a part of the world, for the satellite states of Eastern Europe had followed Moscow in boycotting all sessions.

Secretary General Trygve Lie regarded the boycott as the gravest crisis of the U. N., and he tried single-handed to break the deadlock. In the spring of 1950, he visited Washington, London, Paris and Moscow, talking to Foreign Ministers and heads of state. He was favorable to the admission of the Chinese Communist regime into full membership in the U. N. He maintained that whichever government "has the power to employ the resources and direct the people of the state in fulfillment of the obligations of membership in the United Nations" should be admitted. Otherwise, he argued, "the people of China are denied their fundamental constitutional right under the Charter to be represented in the U. N. at all times."

The U. S. refused to recognize the Communists or to vote for their admission to the U. N., but we announced that if a

majority of the Security Council voted to admit that regime, we would not exercise the veto to keep it out.

It was Trygve Lie's hope that the Chinese Communists could be admitted and that, in return, Russia would come back to the U. N. and consent to take part in one or more special meetings of the Security Council. At these special meetings, the actual policy-making officials—Foreign Ministers or heads of state—would represent their countries instead of the regular U. N. delegates. Such meetings, Mr. Lie hoped, would lay the groundwork for ending the "cold war." His efforts were interrupted by the invasion of South Korea.

THE WAR IN KOREA

At the end of World War II, military authorities of the U. S. and the Soviet Union agreed that the American Army would receive the surrender of Japanese forces south of the 38th parallel in Korea, and that Russia would receive the surrender north of that parallel. At that time there was no thought of splitting Korea in two; rather, the agreement was that after a period of occupation, Korean elections would be held and a republic set up to govern the whole country.

Russia refused to co-operate in holding all-Korean elections, and the U. S. appealed for advice to the U. N., which sent a commission to Korea to supervise free elections. However, since the commission was denied entrance to North Korea, it could only assist in supervising free elections below the 38th parallel. In the summer of 1948, the Republic of Korea was established in the southern half of the peninsula, with Dr. Syngman Rhee as its President, and it won diplomatic recognition from the nations of the West and the U. N.

Meanwhile, the Russians in the northern half of the country had set up a People's Republic of Korea, which was widely regarded as a puppet government modeled after those in other Soviet satellite states.

On Jan. 1, 1949, Russia announced that its occupation troops had been withdrawn from North Korea; and, six months later, the U. S. withdrew its occupation troops from South Korea. However, both the U. S. and Russia left behind military missions to aid in establishing defense forces in the areas previously occupied. In addition, the U. N. commission remained in South Korea.

On June 25, 1950, the Communist army of North Korea invaded South Korea. The Communists said the South Koreans were the ones who had attacked first. But the U. N. commission had been at the 38th-parallel border only a few days before; and it reported to U. N. headquarters at Lake Success that the South Koreans had been taken wholly by surprise, their preparations entirely defensive.

Within a few hours after the invasion was launched, the U. S. requested a special meeting of the U. N. Security Council, which was held on Sunday afternoon, June 25. The Council branded the fighting a breach of the peace under Chapter VII of the Charter and called for a cease-fire within 24 hours.

On the morning of June 27, it was apparent that the North Koreans were going ahead with their invasion in a systematic and successful way. President Truman then announced that America air and naval forces would take part in the fighting to assist the South Koreans in defending themselves. That afternoon, the Security Council met again at Lake Success and recommended "that the members of the United Nations furnish such assistance to the Republic of Korea as may be necessary to repel the armed attack and to restore international peace and security in the area."

This resolution was passed in the absence of the Soviet Union, which was continuing its voluntary boycott of U. N. sessions. The resolution had the effect (1) of branding North Korea as the aggressor, and (2) of putting the Security Council seal of approval on U. S. armed intervention. Theoretically, the U. N. should have had, under Article 43 of the Charter, armed forces at its disposal; but such forces never had been agreed upon because of the split between Russia and the West. In Korea, the Council regarded the U. S. as its initial military instrument.

The Council vote was 7 to 1, with Yugoslavia opposed and India and Egypt abstaining, though India later signified its agreement with the vote. During the following fortnight, 47 nations notified Secretary General Lie that they supported the decisions and recommendations of the Security Council; and Britain, Australia and Canada were among the twelve nations that offered tangible fighting assistance in the form of naval, air or ground forces. It had become a U. N. war in defense of South Korea, and the Security Council authorized the use of the U. N. flag in military operations. It also asked the U. S. to set up a unified command, and General of the Army Douglas MacArthur was named commander of the U. N. forces.

THE RETURN OF RUSSIA

On August 1, under the monthly rotation system, it became Soviet Russia's turn to preside over the Security Council. To the general surprise, Russia ended its boycott, and Yakov A. Malik took his seat as chairman. He began by ruling that the Nationalist China delegate did not represent his country and was not eligible to participate in the Council meetings. His ruling was overthrown by a vote of 8 to 3, with Yugoslavia and India siding with Russia.

During the next few days, Malik presented the Russian position regarding Korea. He maintained that the Security Council resolution calling for armed aid to South Korea was illegal because Russia and Communist China were not represented in the voting. He also maintained that the fighting in Korea was strictly a civil war and that the U. N. had no right to interfere. Malik denounced the U. S. as an "imperialist aggressor."

There was general agreement among the nations of the West that Russia had induced the North Korean Communists to launch the invasion; that Russian-made tanks, planes and other arms were being used; and that Russian military advisers were directing strategy. Warren R. Austin, chief U. S. delegate, pointed to Russia's guilt in these words: "Who has the influence and the power to call off the invading North Korean army? The Soviet Union. . . . What member of this Security Council is assisting in the Security Council the invaders? The Soviet Union."

Malik insisted that the Security Council deal with the question of admitting the Chinese Communists before dealing further with the Korean war, but the council majority insisted that Korea was the chief problem. Malik's tactics blocked action.

The Council was paralyzed during August when Yakov A. Malik, of the Soviet Union, was the presiding officer. In September, the chairman was Sir Gladwyn Jebb.

Sir Gladwyn put to a vote an American resolution, introduced more than a month before, calling for U. N. condemnation of North Korea for continuing the invasion of South Korea in defiance of the U. N. It also called upon all nations to refrain from assisting North Korea. The vote on the resolution was 9 to 1, with Yugoslavia abstaining. The negative vote was cast by Russia and constituted her forty-fourth veto. It killed the resolution.

Russia's forty-fifth veto was cast a few days later, killing a U. S. resolution that proposed an independent inquiry into whether U. S. planes had accidentally bombed Chinese territory in Manchuria.

THE ISRAEL CASE

The U. N. had been working to bring about peace between Israel and the neighboring Arab countries ever since Israel had proclaimed independence on May 14, 1948, and had been immediately involved in war. The fighting dwindled out in the spring of 1949, and the U. N. set up a Palestine Conciliation Commission in the hope of facilitating permanent peace treaties to replace the temporary armistices that had gone into effect. The Commission was still struggling with the problem in the autumn of 1950, without complete success.

Meanwhile, approaching the matter from

a different angle, the General Assembly voted, on Dec. 9, 1949, to put Jerusalem under the international rule of the U. N. The Assembly vote was 38 to 14, with a curious combination making up the majority—Soviet-bloc states, Latin American states and Arab states. Political and religious motivations counted heavily. The U. S. and Britain voted in the negative.

In obedience to the Assembly's instructions, the Trusteeship Council drew up in the spring of 1950 a detailed plan for U. N. rule of Jerusalem. The plan was emphatically rejected by Israel, which possessed the New City of Jerusalem, and by the Hashemite Kingdom of Jordan, which possessed the Old City. Both refused to give up what they held; and, on June 14, 1950, the Trusteeship Council officially acknowledged that it was unable to impose U. N. rule on Jerusalem and referred the problem back to the General Assembly.

THE KASHMIR CASE

Kashmir is a princely state in India about the size of Kansas, with a population of four million. When the Indian subcontinent was divided in 1947 between India and Pakistan, both the new nations coveted Kashmir. Moslem tribesmen from Pakistan invaded Kashmir in an effort to seize control, and India sent troops to fight the invaders. The result was warfare on a limited scale, but at any time it might have flared into a full-fledged civil war and torn the whole Indian subcontinent asunder.

Early in 1948, India took the case to the U. N., accusing Pakistan of aggression. A U. N. commission was sent to Kashmir, and it succeeded in obtaining a truce at the beginning of 1949. But Pakistan forces occupied the northwestern third of Kashmir; India, the rest; and efforts to bring about a permanent settlement were rejected by one side or the other.

The Kashmir case was still a problem before the Security Council in January, 1950, when the Soviet Union began its boycott of the U. N. Glad of an opportunity to show that it could continue to function despite Russia's absence, the Council turned its attention to Kashmir.

On March 14, the Council voted to abolish the Kashmir commission and substitute a mediator. His task would be (1) to arrange a demilitarization of the areas held by Pakistan and India, in the hope of lessening the chances of a new outbreak of fighting; and (2) to arrange for the taking of a plebiscite to determine which nation the inhabitants preferred to join.

Choosing a mediator acceptable to both Pakistan and India proved difficult; but, after several weeks of consultations, Sir Owen Dixon was designated. He is an Australian jurist and former Australian Minister in Washington.

On Sept. 20, Sir Owen Dixon reported officially to the Security Council that he had been unable to bring India and Pakistan together regarding the future of Kashmir. He asked to be relieved of his post. The two countries, Sir Owen explained, would not agree on terms for demilitarizing the areas their troops occupied so that a plebiscite could be held. Sir Owen came to the conclusion that partition of Kashmir was the only possible solution, but he could not get India and Pakistan to agree on that, either. He recommended that the U. N. press the two countries to settle the affair themselves.

ECONOMIC AND SOCIAL COUNCIL

One of the U. N. agencies that recorded progress despite the Soviet boycott was the Economic and Social Council, which, in August, 1950, completed its eleventh session in Geneva, Switzerland.

The Council adopted an elaborate long-range program for combating economic depression and unemployment, the cost of carrying out the program being estimated at \$250,000. One part of the program consisted of recommendations to the various governments for the avoidance of large-scale unemployment. The other part provided for international collaboration to prevent the spread of unemployment.

Each country was asked to report annually on its economic objectives and prospects, with forecasts of its employment level, production and investment. A Council commission would then review all the data, consider the impact of one country's action upon other countries, and provide a forum for exchange of criticism.

THE GENERAL ASSEMBLY

The U. N. General Assembly opened its fifth annual meeting on Sept. 19, 1950, at Flushing Meadow, N. Y. All 59 members were represented by delegations, including Soviet Russia, which sent its Foreign Minister, Andrei A. Vishinsky, as chief delegate. Nasrollah Entezam, of Iran, was elected President for the session.

There were 73 items on the agenda, reflecting problems in all parts of the world. Nearly all the problems revolved about the tension between Russia and the West, with Korea the main focus of concern.

Russia carried into the Assembly its campaign to oust from the U. N. the Chinese delegates representing Chiang Kai-shek's Nationalist government on Formosa, and to substitute delegates from the Peiping Communist regime. India was the first nation to propose an immediate invitation to the Chinese Communists. The Indian resolution was defeated 33 to 16, with 10 abstentions. Similar motions from Russia were beaten by larger votes. The assembly approved a Canadian resolution calling for

further study of the Chinese problem by a special committee.

Immediately after the Assembly's organizing formalities were concluded, Secretary of State Dean Acheson introduced in behalf of the U. S. a proposal for the most fundamental change in the U. N. since its formation in 1945. He proposed a basic revision designed to keep the U. N. functioning for world peace despite the obstacle of the Soviet veto in the Security Council. No formal amendment of the Charter—which would be subject to Russian veto—would be necessary to achieve the change. It could be achieved, said Acheson, simply by giving to the Assembly duties formerly assigned to the Council.

The U. N. Charter, in Article 24, gives the Security Council primary responsibility for maintaining peace. But the Council was paralyzed by Russia's vetoes. In Article 43, the Charter calls upon the member nations to set aside armed forces which the Security Council could employ to enforce peace. But this part of the Charter never had been put into effect, because of Russian objections.

If the Security Council failed to function, said Acheson, there was a legal way to by-pass it. "The Charter, in Articles 10, 11 and 14, also vests in the General Assembly authority and responsibility for matters affecting international peace," he told the Assembly. Therefore, he suggested, let the Assembly, which was not hamstrung by the veto, take primary responsibility for maintaining the peace whenever the Security Council was paralyzed by the Russians.

Let the Assembly, continued Acheson, request each member nation to "designate within its national armed forces a United Nations unit or units to be specially trained and equipped and continuously maintained in readiness for prompt service on behalf of the United Nations." In effect, the U. S. was proposing a world army at the disposal of the General Assembly, instead of the Security Council.

The General Assembly has no power to order any nation to participate in a military pool or any other project. It can only recommend action. But an official recommendation proved a powerful influence in the case of the Security Council's recommendation for joint action in Korea. The Security Council did not order such action.

Secretary Acheson added two supplementary proposals. First, the Assembly should revise its rules to make possible the calling of an emergency session within 24 hours after the Security Council found itself unable to deal with a crisis. Second, the Assembly should create a new agency—a "security patrol, a peace patrol"—ready to go anywhere in the world where threat to the peace had arisen, and to report the facts of the case.

CHARTER OF THE UNITED NATIONS

WE, the peoples of the United Nations determined to save succeeding generations from the scourge of war, which trials in our lifetime have brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I

Purposes and Principles

Article 1

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international co-operation in solving international problems of an economic, social, cultural or humanitarian

character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion; and

4. To be a center for harmonizing the actions of nations in the attainment of these common ends.

Article 2

The organization and its members, in pursuit of the purposes stated in Article 1, shall act in accordance with the following principles:

1. The organization is based on the principle of the sovereign equality of all its members.

2. All members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations.

5. All members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The organization shall ensure that states not members of the United Nations act in accordance with these principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER II

Membership

Article 3

The original members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or have previously signed

the Declaration by United Nations of Jan. 1, 1942, sign the present Charter and ratify it in accordance with Article 110.

Article 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the organization, are able and willing to carry out these obligations.

2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

Article 5

A member of the United Nations against which preventive or enforcement action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

Article 6

A member of the United Nations which has persistently violated the principles contained in the present Charter may be expelled from the organization by the General Assembly upon the recommendation of the Security Council.

CHAPTER III

Organs

Article 7

1. There are established as the principal organs of the United Nations: A General Assembly, a Security Council, an Economic and Social Council, a Trusteeship Council, an International Court of Justice and a Secretariat.

2. Such subsidiary organs as may be found necessary may be established in accordance with the present Charter.

Article 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

CHAPTER IV

The General Assembly Composition

Article 9

The General Assembly shall consist of all the members of the United Nations.

Each member shall not have more than five representatives in the General Assembly.

Functions and Powers

Article 10

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the members of the United Nations or to the Security Council, or to both, on any such questions or matters.

Article 11

1. The General Assembly may consider the general principles of co-operation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the members or to the Security Council or to both.

2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any member of the United Nations, or by the Security Council, or by a state, which is not a member of the United Nations, in accordance with Article 35, Paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such questions to the state or states concerned or to the Security Council, or both. Any such question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.

3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.

4. The powers of the General Assembly set forth in this Article shall not limit the general scope of Article 10.

Article 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.

2. The Secretary-General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and shall similarly notify the General Assembly, or the members of the United Na-

tions if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

Article 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) Promoting international co-operation in the political field and encouraging the progressive development of international law and its codification;

(b) Promoting international co-operation in the economic, social, cultural, educational and health fields and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in Paragraph 1 (b) above are set forth in Chapters IX and X.

Article 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the purposes and principles of the United Nations.

Article 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other organs of the United Nations.

Article 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

Article 17

1. The General Assembly shall consider and approve the budget of the organization.

2. The expenses of the organization shall be borne by the members as apportioned by the General Assembly.

3. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies re-

ferred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

Voting

Article 18

1. Each member of the General Assembly shall have one vote.

2. Decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, and election of the members of the Economic and Social Council, the election of members of the Trusteeship Council in accordance with Paragraph 1 (c) of Article 86, the admission of new members to the United Nations, the suspension of the rights and privileges of membership, the expulsion of members, questions relating to the operation of the trusteeship system, and budgetary questions.

3. Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a majority of the members present and voting.

Article 19

A member of the United Nations which is in arrears in the payment of its financial contributions to the organization shall have no vote in the General Assembly if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. The General Assembly may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

Procedure

Article 20

The General Assembly shall meet in regular annual sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the Secretary-General at the request of the Security Council or of a majority of the members of the United Nations.

Article 21

The General Assembly shall adopt its own rules of procedure. It shall elect its president for each session.

Article 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions.

CHAPTER V

The Security Council
Composition

Article 23

1. The Security Council shall consist of eleven members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, shall be permanent members of the Security Council. The General Assembly shall elect six other members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members, however, three shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

Functions and Powers

Article 24

1. In order to insure prompt and effective action by the United Nations, its members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the purposes and principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

Article 25

The members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and eco-

nomic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee, referred to in Article 47, plans to be submitted to the members of the United Nations for the establishment of a system for the regulation of armaments.

Voting

Article 27

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI and under Paragraph 3 of Article 52 a party to a dispute shall abstain from voting.

Procedure

Article 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its president.

Article 31

Any member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that member are specially affected.

Article 32

Any member of the United Nations which is not a member of the Security

Council or any state which is not a member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a member of the United Nations.

CHAPTER VI

Pacific Settlement of Disputes

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any member of the United Nations may bring any dispute or any situation of the nature referred to in Article 34 to the attention of the Security Council or of the General Assembly.

2. A state which is not a member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37 the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

CHAPTER VII

Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect

to its decisions, and it may call upon members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate, or have proved to be inadequate, it may take such action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea or land forces of members of the United Nations.

Article 43

1. All members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and members or between the Security Council and groups of members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided to use force it shall, before calling upon a member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that member, if the member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that member's armed forces.

Article 45

In order to enable the United Nations to take urgent military measures, members shall hold immediately available national air force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits laid

down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that member in its work.

3. The Military Staff Committee shall be responsible, under the Security Council, for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional subcommittees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the members of the United Nations, or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a

member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense, if an armed attack occurs against a member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

CHAPTER VIII

Regional Arrangements

Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the purposes and principles of the organization.

2. The members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This Article in no way impairs the application of Articles 34 and 35.

Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in Par-

agraph 2 of this Article, provided for pursuant to Article 107, or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the organization may, on request of the governments concerned, be charged with the responsibility for preventing further aggression by such a state.

2. The term enemy state as used in Paragraph 1 of this Article applies to any state which during the second World War has been an enemy of any signatory of the present Charter.

Article 54

The Security Council shall at all times be kept fully informed of activities undertaken, or in contemplation, under regional arrangements or by regional agencies for the maintenance of international peace and security.

CHAPTER IX

International Economic and Social Co-operation

Article 55

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(a) Higher standards of living, full employment, and conditions of economic and social progress and development;

(b) Solutions of international economic, social, health, and related problems; and international cultural and educational co-operation; and

(c) Universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

Article 56

All members pledge themselves to take joint and separate action in co-operation with the organization for the achievement of the purposes set forth in Article 55.

Article 57

1. The various specialized agencies, established by inter-governmental agreement and having wide international responsibilities, as defined in their basic instruments in economic, social, cultural, educational, health and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Such agencies thus brought into relationship with the United Nations are

hereinafter referred to as specialized agencies.

Article 58

The organization shall make recommendations for the coordination of the policies and activities of the specialized agencies.

Article 59

The organization shall, where appropriate, initiate negotiations among the states concerned for the creation of any new specialized agencies required for the accomplishment of the purposes set forth in Article 55.

Article 60

Responsibility for the discharge of the functions of the organization set forth in this Chapter shall be vested in the General Assembly and, under the authority of the General Assembly, in the Economic and Social Council, which shall have for this purpose the powers set forth in Chapter X.

CHAPTER X

Economic and Social Council

Composition

Article 61

1. The Economic and Social Council shall consist of eighteen members of the United Nations elected by the General Assembly.

2. Subject to the provisions of Paragraph 3, six members of the Economic and Social Council shall be elected each year for a term of three years. A retiring member shall be eligible for immediate re-election.

3. At the first election, eighteen members of the Economic and Social Council shall be chosen. The term of office of six members so chosen shall expire at the end of one year, and of six other members at the end of two years, in accordance with arrangements made by the General Assembly.

4. Each member of the Economic and Social Council shall have one representative.

Functions and Powers

Article 62

1. The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly, to the members of the United Nations, and to the specialized agencies concerned.

2. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

3. It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence.

4. It may call, in accordance with the rules prescribed by the United Nations, international conferences on matters falling within its competence.

Article 63

1. The Economic and Social Council may enter into agreements with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations. Such agreements shall be subject to approval by the General Assembly.

2. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the members of the United Nations.

Article 64

1. The Economic and Social Council may take appropriate steps to obtain regular reports from the specialized agencies. It may make arrangements with the members of the United Nations and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence made by the General Assembly.

2. It may communicate its observations on these reports to the General Assembly.

Article 65

The Economic and Social Council may furnish information to the Security Council and shall assist the Security Council upon its request.

Article 66

1. The Economic and Social Council shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the General Assembly.

2. It may, with the approval of the General Assembly, perform services at the request of members of the United Nations and at the request of the specialized agencies.

3. It shall perform such other functions as are specified elsewhere in the present Charter or as may be assigned to it by the General Assembly.

Voting

Article 67

1. Each member of the Economic and Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

Procedure

Article 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

Article 69

The Economic and Social Council shall invite any member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that member.

Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

Article 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations, and, where appropriate, with national organizations after consultation with the member of the United Nations concerned.

Article 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

CHAPTER XI

Declaration Regarding Non-Self-Governing Territories

Article 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and ac-

cept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:

(a) To insure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) To develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) To further international peace and security;

(d) To promote constructive measures of development, to encourage research, and to co-operate with one another and, when and where appropriate, with specialized international bodies with a view to the practical achievement of the social, economic and scientific purposes set forth in this Article; and

(e) To transmit regularly to the Secretary-General for information purposes, subject to such limitation as security and constitutional considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

Article 74

Members of the United Nations also agree that their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the world in social, economic and commercial matters.

CHAPTER XII

International Trusteeship System

Article 75

The United Nations shall establish under its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are hereinafter referred to as trust territories.

Article 76

The basic objectives of the trusteeship system in accordance with the purposes

of the United Nations laid down in Article 1 of the present Charter, shall be:

(a) To further international peace and security;

(b) To promote the political, economic, social and educational advancement of the inhabitants of the trust territories, and their progressive development toward self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

(c) To encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion, and to encourage recognition of the interdependence of the peoples of the world; and

(d) To insure equal treatment in social, economic and commercial matters for all members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives, and subject to the provisions of Article 80.

Article 77

1. The trusteeship system shall apply to such territories in the following categories as may be placed thereunder by means of trusteeship agreements:

(a) Territories now held under mandate;

(b) Territories which may be detached from enemy states as a result of the second World War; and

(c) Territories voluntarily placed under the system by states responsible for their administration.

2. It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

Article 78

The trusteeship system shall not apply to territories which have become members of the United Nations, relationship among which shall be based on respect for the principle of sovereign equality.

Article 79

The terms of trusteeship for each territory to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the states directly concerned, including the mandatory power in the case of territories held under mandate by a member of the United Nations, and shall be approved as provided for in Articles 83 and 85.

Article 80

1. Except as may be agreed upon in individual trusteeship agreements, made under Articles 77, 79 and 81, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this Chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which members of the United Nations may respectively be parties.

2. Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

Article 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which will exercise the administration of the trust territory. Such authority, hereinafter called the administering authority, may be one or more states or the organization itself.

Article 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

Article 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social and educational matters in the strategic areas.

Article 84

It shall be the duty of the administering authority to insure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facili-

ties, and assistance from the trust territory in carrying out the obligations toward the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

Article 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

CHAPTER XIII

The Trusteeship Council Composition

Article 86

1. The Trusteeship Council shall consist of the following members of the United Nations:

(a) Those members administering trust territories;

(b) Such of those members mentioned by name in Article 23 as are not administering trust territories; and

(c) As many other members elected for three-year terms by the General Assembly as may be necessary to insure that the total number of members of the Trusteeship Council is equally divided between those members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

Functions and Powers

Article 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

(a) Consider reports submitted by the administering authority;

(b) Accept petitions and examine them in consultation with the administering authority;

(c) Provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

(d) Take these and other actions in conformity with the terms of the trusteeship agreements.

Article 88

The trusteeship Council shall formulate a questionnaire on the political, economic, social and educational advancement of the inhabitants of each trust territory, and the administering authority for each trust territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

Voting

Article 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

Procedure

Article 90

1. The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Trusteeship Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

CHAPTER XIV

The International Court of Justice

Article 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed statute, which is based upon the statute of the Permanent Court of International Justice and forms an integral part of the present Chapter.

Article 93

1. All members of the United Nations are ipso facto parties to the statute of the International Court of Justice.

2. A state which is not a member of the United Nations may become a party to the statute of the International Court of Justice on conditions to be determined in each case by the General Assembly upon the recommendation of the Security Council.

Article 94

1. Each member of the United Nations undertakes to comply with the decision of

the International Court of Justice in any case to which it is a party.

2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

Article 95

Nothing in the present Charter shall prevent members of the United Nations from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

Article 96

1. The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

2. Other organs of the United Nations and specialized agencies which may at any time be so authorized by the General Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

CHAPTER XV

The Secretariat

Article 97

The Secretariat shall comprise a Secretary General and such staff as the organization may require. The Secretary General shall be appointed by the General Assembly upon the recommendation of the Security Council. He shall be the chief administrative officer of the organization.

Article 98

The Secretary General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary General shall make an annual report to the General Assembly on the work of the organization.

Article 99

The Secretary General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

Article 100

1. In the performance of their duties the Secretary General and the staff shall not seek or receive instructions from any government or from any other authority external to the organization. They shall

refrain from any action which might reflect on their position as international officials responsible only to the organization.

2. Each member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary General and the staff, and not to seek to influence them in the discharge of their responsibilities.

Article 101

1. The staff shall be appointed by the Secretary General under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

CHAPTER XVI

Miscellaneous Provisions

Article 102

1. Every treaty and every international agreement entered into by any member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of Paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations.

Article 103

In the event of a conflict between the obligations of the members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.

Article 104

The organization shall enjoy in the territory of each of its members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

Article 105

1. The organization shall enjoy in the territory of each of its members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the members of the United Nations and officials of the organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of Paragraphs 1 and 2 of this Article or may propose conventions to the members of the United Nations for this purpose.

CHAPTER XVII

Transitional Security Arrangements

Article 106

Pending the coming into force of such special agreements referred to in Article 43, as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the Four-Nation Declaration, signed at Moscow, Oct. 30, 1943, and France, shall, in accordance with the provisions of Paragraph 5 of that Declaration, consult with one another and, as occasion requires, with other members of the United Nations with a view to such joint action on behalf of the organization as may be necessary for the purpose of maintaining international peace and security.

Article 107

Nothing in the present Charter shall invalidate or preclude action in relation to any state which during the second World War has been an enemy of any signatory to the present Charter, taken or authorized as a result of that war by the governments having responsibility for such action.

CHAPTER XVIII

Amendments

Article 108

Amendments to the present Charter shall come into force for all members of the United Nations when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations, including all the permanent members of the Security Council.

Article 109

1. A general conference of the members of the United Nations for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds vote of the members of the General Assembly and by a vote of any seven members of the Security Council. Each member of the United Nations shall have one vote in the conference.

2. Any alteration of the present Charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

CHAPTER XIX

Ratification and Signature

Article 110

1. The present Charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify all the signatory states of each deposit as well as the Secretary General of the organization when he has been appointed.

3. The present Charter shall come into force upon the deposit of ratifications by the Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and by a majority of the other signatory states. A protocol of the ratifications deposited shall thereupon be drawn up by the Government of the United States of America which shall communicate copies thereof to all the signatory states.

4. The states signatory to the present Charter which ratify it after it has come into force will become original members of the United Nations on the date of the deposit of their respective ratifications.

Article 111

The present Charter, of which the Chinese, French, Russian, English and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

In faith whereof the representatives of the Governments of the United Nations have signed the present Charter.

Done at the city of San Francisco the twenty-sixth day of June, one thousand nine hundred and forty-five.

NORTH ATLANTIC TREATY

Preamble

THE Parties to this Treaty reaffirm their faith in the purposes and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all governments.

They are determined to safeguard the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law.

They seek to promote stability and well-being in the North Atlantic area.

They are resolved to unite their efforts for collective defense and for the preservation of peace and security.

They therefore agree to this North Atlantic Treaty:

Article 1

The Parties undertake, as set forth in the Charter of the United Nations, to settle any international disputes in which they may be involved by peaceful means in such a manner that international peace and security, and justice, are not endangered, and to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations.

Article 2

The Parties will contribute toward the further development of peaceful and friendly international relations by strengthening their free institutions, by bringing about a better understanding of the principles upon which these institutions are founded, and by promoting conditions of stability and well-being. They will seek to eliminate conflict in their international economic policies and will encourage economic collaboration between any or all of them.

Article 3

In order more effectively to achieve the objectives of this Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack.

Article 4

The Parties will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the Parties is threatened.

Article 5

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently

they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.

Any such armed attack and all measures taken as a result thereof shall immediately be reported to the Security Council. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

Article 6

For the purpose of Article 5 an armed attack on one or more of the Parties is deemed to include an armed attack on the territory of any of the Parties in Europe or North America, on the Algerian departments of France, on the occupation forces of any Party in Europe, on the islands under the jurisdiction of any Party in the North Atlantic area north of the Tropic of Cancer or on the vessels or aircraft in this area of any of the Parties.

Article 7

This Treaty does not affect, and shall not be interpreted as affecting, in any way the rights and obligations under the Charter of the Parties which are members of the United Nations, or the primary responsibility of the Security Council for the maintenance of international peace and security.

Article 8

Each Party declares that none of the international engagements now in force between it and any other of the Parties or any third state is in conflict with the provisions of this Treaty, and undertakes not to enter into any international engagement in conflict with this Treaty.

Article 9

The Parties hereby establish a council, on which each of them shall be represented, to consider matters concerning the implementation of this Treaty. The council shall be so organized as to be able to meet promptly at any time. The council shall set up such subsidiary bodies as may be necessary; in particular it shall establish immediately a defense committee which shall recommend measures for the implementation of Articles 3 and 5.

Article 10

The Parties may, by unanimous agree-

North Atlantic Treaty—(cont.)

ment, invite any other European state in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area to accede to this Treaty. Any state so invited may become a party to the Treaty by depositing its instrument of accession with the Government of the United States of America. The Government of the United States of America will inform each of the Parties of the deposit of each such instrument of accession.

Article 11

This Treaty shall be ratified and its provisions carried out by the Parties in accordance with their respective constitutional processes. The instruments of ratification shall be deposited as soon as possible with the Government of the United States of America, which will notify all the other signatories of each deposit. The Treaty shall enter into force between the states which have ratified it as soon as the ratifications of the majority of the signatories, including the ratifications of Belgium, Canada, France, Luxembourg, the Netherlands, the United Kingdom and the United States, have been deposited and shall come into effect with respect to other states on the date of the deposit of their ratifications.

Article 12

After the Treaty has been in force for ten years, or at any time thereafter, the Parties shall, if any of them so requests, consult together for the purpose of reviewing the Treaty, having regard for the factors then affecting peace and security in the North Atlantic area, including the development of universal as well as regional arrangements under the Charter of the United Nations for the maintenance of international peace and security.

Article 13

After the Treaty has been in force for twenty years, any Party may cease to be a party one year after its notice of denunciation has been given to the Government of the United States of America, which will inform the Governments of the other Parties of the deposit of each notice of denunciation.

Article 14

This Treaty, of which the English and French texts are equally authentic, shall be deposited in the archives of the Government of the United States of America. Duly certified copies thereof will be transmitted by that Government to the Governments of the other signatories.

In witness whereof, the undersigned plenipotentiaries have signed this Treaty.

Done at Washington, the fourth day of April, 1949.

Definitions

COLONY: a company of people, purposely or otherwise, transplanted from their mother country and remaining subject to the jurisdiction of the parent state.

CROWN COLONY: a British Empire colony in which the crown retains some kind of control over legislation.

DOMINION: an autonomous community within the British Empire, equal in status to any other dominion, but united by a common allegiance to the crown.

PROTECTORATE: an area which is protected by a superior authority from domestic or foreign disturbance or dictation and shares in its own government.

MANDATE: order or commission granted by League of Nations (before its defunctification) as mandator to a member nation.

SPHERE OF INFLUENCE: a territory within which the political influence or the interests of one nation are permitted by other nations to be more or less exclusive. Also loosely used to denote regions more or less under the control of a nation but not constituting a formally recognized protectorate or suzerainty.

SUZERAIN: a state that exercises political control over another state in relation to which it is sovereign.

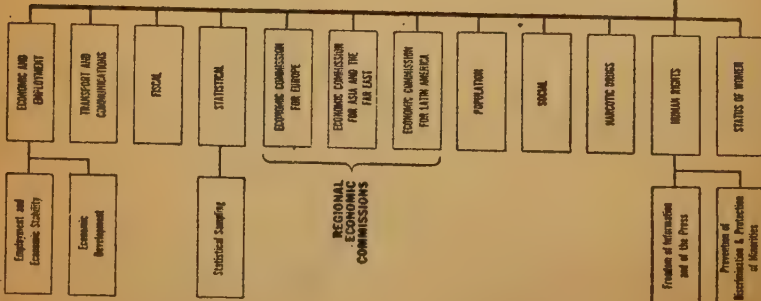
TRUSTEESHIP: administration by a member of the United Nations of an area not yet ready for self-government.

The Flag of the United Nations

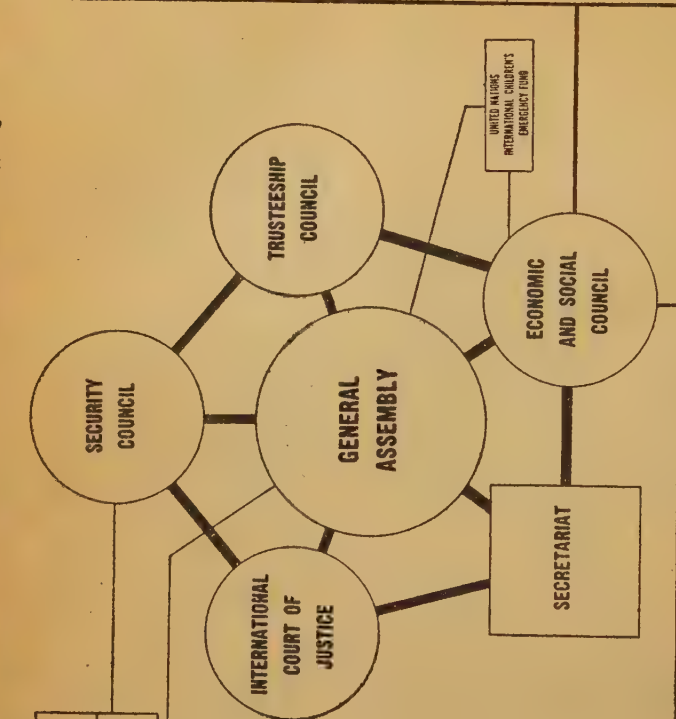
The Legal Commission of the General Assembly unanimously adopted the following U. N. flag design on October 7, 1947: white U. N. emblem (global map projected from the North Pole and embraced in twin olive branches) centered on a rectangular blue banner.

ORGANS OF THE UNITED NATIONS

Subcommissions COMMISSIONS



PRINCIPAL ORGANS



SPECIALIZED AGENCIES

INTERNATIONAL LABOUR ORGANIZATION
 FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
 INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
 INTERNATIONAL MONETARY FUND
 INTERNATIONAL TRADE ORGANIZATION
 INTERNATIONAL CIVIL AVIATION ORGANIZATION
 INTERNATIONAL TELECOMMUNICATION UNION
 UNIVERSAL POSTAL UNION
 INTER-GOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION
 UNITED NATIONS EDUCATIONAL, SCIENTIFIC & CULTURAL ORGANIZATION
 WORLD HEALTH ORGANIZATION
 INTERNATIONAL REFUGEE ORGANIZATION
 WORLD METEOROLOGICAL ORGANIZATION
 UNITED NATIONS CHILDREN'S EMERGENCY FUND

The 60 Members of the United Nations, Oct., 1950

Country	Signed U. N. Decla- ration ¹	Joined U. N. Organi- zation ²	League of Nations ³	Country	Signed U. N. Decla- ration ¹	Joined U. N. Organi- zation ²	League of Nations ³
Afghanistan.....	.....	1946	1934-46	Iraq.....	1943	1945	1932-46
Argentina.....	1945	1945	1919-46	Israel.....	.....	1949	.....
Australia.....	1942	1945	1920-46	Lebanon.....	1945	1945	.....
Belgium.....	1942	1945	1920-46	Liberia.....	1944	1945	1920-46
Bolivia.....	1943	1945	1920-46	Luxemburg.....	1942	1945	1920-46
Brazil.....	1943	1945	1920-28	Mexico.....	1942	1945	1931-46
Burma.....	.....	1948	.....	Netherlands.....	1942	1945	1920-46
Byelorussian S.S.R. ⁴	.....	1945	.....	New Zealand.....	1942	1945	1920-46
Canada.....	1942	1945	1920-46	Nicaragua.....	1942	1945	1920-38
Chile.....	1945	1945	1919-40	Norway.....	1942	1945	1920-46
China.....	1942	1945	1920-46	Pakistan.....	.....	1947	.....
Colombia.....	1944	1945	1920-46	Panamá.....	1942	1945	1920-46
Costa Rica.....	1942	1945	1920-26	Paraguay.....	1945	1945	1920-37
Cuba.....	1942	1945	1920-46	Peru.....	1945	1945	1920-41
Czechoslovakia.....	1942	1945	1920-46	Philippines.....	1942	1945	.....
Denmark ⁵.....	.....	1945	1920-46	Poland ⁶	1942	1945	1920-46
Dominican Republic.....	1942	1945	1924-46	Saudi Arabia.....	1945	1945	.....
Ecuador.....	1945	1945	1934-46	South Africa, U. of.....	1942	1945	1920-46
Egypt.....	1945	1945	1937-46	Sweden.....	.....	1946	1920-46
El Salvador.....	1942	1945	1920-39	Syria.....	1945	1945	.....
Ethiopia.....	1943	1945	1923-46	Thailand.....	.....	1946	1920-46
France.....	1945	1945	1920-46	Turkey.....	1945	1945	1932-46
Greece.....	1942	1945	1920-46	Ukrainian S.S.R. ⁴	.....	1945	.....
Guatemala.....	1942	1945	1920-38	United Kingdom.....	1942	1945	1920-46
Haiti.....	1942	1945	1920-44	United States.....	1942	1945	.....
Honduras.....	1942	1945	1920-38	U.S.S.R.....	1942	1945	1934-39
Iceland.....	.....	1946	.....	Uruguay.....	1945	1945	1920-46
India.....	1942	1945	1920-46	Venezuela.....	1945	1945	1920-40
Indonesia.....	.....	1950	.....	Yemen.....	.....	1947	.....
Iran.....	1943	1945	1919-46	Yugoslavia.....	1942	1945	1920-46

¹ Declaration of United Nations was originally signed by 26 nations in Washington, D.C., on Jan. 1, 1942. ² U.N. officially came into existence Oct. 24, 1945. ³ League was formally dissolved Apr. 18, 1946. Nations withdrawing before that time did so voluntarily, except U.S.S.R., which was expelled. Other members of League were: Albania (1920-46), Austria (1920-40), Bulgaria (1920-46), Eire (1923-46), Estonia (1921-46), Finland (1920-46), Germany (1926-35), Hungary (1922-41), Italy (1920-39), Japan (1920-35), Latvia (1921-46), Lithuania (1921-46), Portugal (1920-46), Rumania (1920-42), Spain (1920-41), Switzerland (1920-46). ⁴ Admission as separate nation approved at San Francisco Conference. ⁵ Invited to attend San Francisco Conference June 5, 1945, after its liberation. ⁶ Not represented at San Francisco Conference, but subsequently signed Charter as original member.

Delegation Heads to the United Nations

Members Represented at
Interim Headquarters*

Afghanistan: Abdol Hosayn Aziz
 Argentina: Dr. Jerónimo Remorino
 Australia: Keith Charles Owen Shann (act-
 ing)
 Belgium: Fernand van Langenhove
 Bolivia: Eduardo Anze Matienzo
 Brazil: Joao Carlos Muniz
 Canada: R. G. Riddell
 Chile: Hernán Santa Cruz
 China: Dr. Tingfu F. Tsiang
 Colombia: Eliseo Arango
 Costa Rica: Daniel Oduber
 Cuba: Dr. Alberto I. Alvarez
 Czechoslovakia: Jiri Nosek (acting)
 Denmark: William Borberg
 Dominican Republic: Dr. Max Henriquez-
 Urena
 Ecuador: Dr. Antonio Quevedo
 Egypt: Mahmoud Fawzi Bey
 France: Jean Chauvel
 Greece: Alexis Kyrou
 Guatemala: Dr. Carlos García Bauer

Haiti: Dr. Jean Price-Mars
 Honduras: Dr. Tiburcio Carías, Jr.
 Iceland: Thor Thors
 India: Sir Benegal Narsing Rau
 Iran: Nasrollah Entezam
 Iraq: Dr. Fadhl Jamali
 Israel: Aubrey S. Eban
 Liberia: Charles D. B. King
 Mexico: Dr. Luis Padilla Nervo
 Netherlands: Daniel Johannes von Ballu-
 seck
 New Zealand: Sir Carl Berendsen
 Nicaragua: Dr. Guillermo Sevilla-Sacasa
 Norway: Arne Sunde
 Pakistan: Prof. Ahmed S. Bokhari
 Panamá: Jephtha B. Duncan
 Paraguay: Dr. Osvaldo Chaves
 Peru: Carlos Holguín de Lavalle
 Philippines: Brig. Gen. Carlos P. Romulo
 Poland: Juliusz Katz-Suchy
 Saudi Arabia: Sheikh Asad Al-Faith

* Permanent representative to U. N.

Sweden: Sven Grafström
 Syria: Faris Bey el-Khourl
 Thailand: Prince Wan Walthayakon
 Turkey: Selim Sarper
 Union of South Africa: G. P. Jooste
 U.S.S.R.: Yakov A. Malik

United Kingdom: Sir Gladwyn Jebb
 United States: Warren R. Austin
 Uruguay: Prof. Enrique Rodriguez Fabregat
 Venezuela: Dr. César Gonzalez
 Yugoslavia: Dr. Ales Bebler

Security Council*

China: Dr. Tingfu F. Tsiang
 Cuba: Dr. Alberto I. Alvarez
 Ecuador: Dr. Antonio Quevedo
 Egypt: Mahmoud Fawzi Bey
 France: Jean Chauvel
 India: Sir Benegal Narsing Rau
 Norway: Arne Sundt

U.S.S.R.: Yakov A. Malik
 United Kingdom: Sir Gladwyn Jebb
 United States: Warren R. Austin
 Yugoslavia: Dr. Ales Bebler

* As of 1950. On Jan. 1, 1951, Brazil, Netherlands, and Turkey will replace Cuba, Egypt, and Norway.

Economic and Social Council*

Australia: E. Ronald Walker
 Belgium: Fernand Dehousse
 Brazil: Helle Lobo
 Canada: Alphonse Fournier
 Chile: Hernán Santa Cruz
 China: Dr. P. C. Chang
 Czechoslovakia: Arnost Tauber
 Denmark: William Borberg
 France: Pierre Mendes-France
 India: Sir A. Ramaswami Mudaliar
 Iran: Nasrollah Entezam

Mexico: Dr. Luis Padilla Nervo
 Pakistan: Nurul Amin
 Peru: Dr. Teodosio Cabada
 Poland: Juliusz Katz-Suchy
 U.S.S.R.: Amazasp Arutiunian
 United Kingdom: Viscount Alexander of Hillsborough
 United States: Isadore Lubin

* As of eleventh session held in Geneva, July 3 to Aug. 16, 1950. On Jan. 1, 1951, Philippines, Sweden, and Uruguay will replace Australia, Brazil, and Denmark.

Trusteeship Council*

Argentina: Dr. Jerónimo Remorino
 Australia: Alfred Thorp Stirling
 Belgium: Pierre Ryckmans
 China: Dr. S. S. Liu
 Dominican Republic: Dr. Max Henriquez-Urena
 France: Roger Garreau
 Iraq: Awni Khalidi

New Zealand: Sir Carl Berendsen
 Philippines: Brig. Gen. Carlos P. Romulo
 U.S.S.R.: Aleksander A. Soldatov
 United Kingdom: John Fletcher-Cooke
 United States: Francis B. Sayre

* As of seventh session held at Lake Success, N. Y., June 1 to July 21, 1950. On Jan. 1, 1951, Thailand will replace Philippines.

Nations Serving Terms on U. N. Councils

Security Council

Permanent members: China; France; United Kingdom; U. S.; U.S.S.R.
 Jan. 1946-Dec. 1946: Egypt; Mexico; Netherlands.
 Jan. 1946-Dec. 1947: Australia; Brazil; Poland.
 Jan. 1947-Dec. 1948: Belgium; Colombia; Syria.
 Jan. 1948-Dec. 1949: Argentina; Canada; Ukrainian S.S.R.
 Jan. 1949-Dec. 1950: Cuba; Egypt; Norway.
 Jan. 1950-Dec. 1951: Ecuador; India; Yugoslavia.
 Jan. 1951-Dec. 1952: Brazil; Netherlands; Turkey.

Economic and Social Council

Jan. 1946-Dec. 1946: Colombia; Greece; Lebanon; Ukrainian S.S.R.; U. S.; Yugoslavia.
 Jan. 1946-Dec. 1947: Cuba; Czechoslovakia; India; Norway; United Kingdom; U.S.S.R.
 Jan. 1946-Dec. 1948: Belgium; Canada; Chile; China; France; Peru.

Jan. 1947-Dec. 1949: Byelorussian S.S.R.; Lebanon; New Zealand; Turkey; U. S.; Venezuela.

Jan. 1948-Dec. 1950: Australia; Brazil; Denmark; Poland; United Kingdom; U.S.S.R.

Jan. 1949-Dec. 1951: Belgium; Chile; China; France; India; Peru.

Jan. 1950-Dec. 1952: Canada; Czechoslovakia; Iran; Mexico; Pakistan; U. S.

Jan. 1951-Dec. 1953: Philippines; Poland; Sweden; United Kingdom; Uruguay; U.S.S.R.

Trusteeship Council

Permanent members: Australia*; Belgium*; China†; France*; New Zealand*; United Kingdom*; U. S.*; U.S.S.R.†
 Jan. 1947-Dec. 1949: Iraq; Mexico.
 Jan. 1948-Dec. 1950: Costa Rica (resigned 1949 and replaced by Dominican Republic); Philippines.
 Jan. 1950-Dec. 1952: Argentina; Iraq.
 Jan. 1951-Dec. 1953: Dominican Republic; Thailand.

* Administering trust territories. † Permanent member of Security Council not administering trust territories.

Judges of International Court of Justice

(Judges serve for a 9-year term and may be re-elected. In the first election of Feb. 6, 1946, however, they were designated for terms of 3, 6 and 9 years. In the second election of Oct. 22, 1948, all 5 judges whose terms were due to expire in 1949 were re-elected for full terms. Expiration dates of terms are shown in parentheses. The seat of the Court is The Hague, Netherlands.)

President: Jules Basdevant, France (1955)

Vice President: José G. Guerrero, El Salvador (1955)

Alejandro Alvarez, Chile (1955)

Abdel Hamid Badawi Pasha, Egypt (1958)

J. Philadelpho de Barros e Azevedo, Brazil (1955)

Isidro Fabela Alfaro, Mexico (1952)

Green H. Hackworth, U. S. (1952)

Hsu Mo, China (1958)

Helge Klaestad, Norway (1952)

Sergei B. Krylov, U.S.S.R. (1952)

Sir Arnold D. McNair, U. K. (1952)

John M. Read, Canada (1958)

Charles de Visscher, Belgium (1952)

Bohdan Winiarski, Poland (1958)

Milovan Zoritch, Yugoslavia (1958)

Specialized Agencies of the United Nations

Source: U. N. Dept. of Public Information (Research Section)

Food and Agriculture Organization of the United Nations (FAO)

Established: Oct. 16, 1945, when constitution was signed in Quebec.

Purposes: To raise nutrition levels and living standards; to secure improvements in production and distribution of food and agricultural products; to better condition of country dwellers; by these means, to contribute to expanding world economy.

Temporary headquarters: 1201 Connecticut Ave., N.W., Washington 6, D. C.

Inter-Governmental Maritime Consultative Organization (IMCO)

Established: Will not come into existence until 21 nations, of which 7 must each have a total tonnage of at least one million gross tons of shipping, have become parties to convention drawn up by U. N. Maritime Conference at Geneva, Feb. 19 to Mar. 6, 1948. (Preparatory Committee established by Conference will cease to exist after IMCO comes into being.)

Purposes: To promote co-operation among governments in technical problems of international shipping and to encourage removal of discriminatory action by governments and of unfair restrictive practices by shipping concerns.

Headquarters: To be in London.

International Bank for Reconstruction and Development (Bank)

Established: Dec. 27, 1945, when 28 nations signed Articles of Agreement drawn up at Bretton Woods Conference in July, 1944.

Purposes: To assist in reconstruction and development of economies of members by making loans directly and promoting private foreign investment; to promote balanced growth of international trade and maintain equilibrium in balance of payments.

Headquarters: 1818 H St., Washington 25, D. C.

International Civil Aviation Organization (ICAO)

Established: Apr. 4, 1947, 30 days after 26th nation ratified Convention on International Civil Aviation adopted Dec. 7, 1944, by Chicago International Civil Aviation Conference.

Purposes: To study problems of international civil aviation and establish international standards and regulations.

Headquarters: International Aviation Bldg., Montreal, Canada.

International Labour Organisation (ILO)*

Established: Apr. 11, 1919, when constitution was adopted as Part XIII of Treaty of Versailles.

Purposes: To contribute to establishment of lasting peace by promoting social justice; to improve, through international action, labor conditions and living standards; to promote economic and social stability.

Headquarters: Geneva, Switzerland.

International Monetary Fund (Fund)

Established: Dec. 27, 1945, when nations whose quotas amounted to 80% of Fund's resources had signed Articles of Agreement drawn up at Bretton Woods.

Purposes: To promote international monetary co-operation and expansion of international trade; to promote exchange stability; to assist in establishment of multilateral system of payments in respect of current transactions between members.

Headquarters: 1818 H St., Washington 6, D. C.

International Refugee Organization (IRO)

Established: Aug. 20, 1948, when 15 nations contributing at least 75% of operational budget had become party to constitution.

Purposes: To provide following services in regard to refugees and displaced persons.

* Spelling preferred by ILO.

Specialized Agencies of the United Nations—(cont.)

sons; Repatriation; identification, registration and classification; care and assistance; legal and political protection; transport; and resettlement and re-establishment.

Headquarters: Palais Willson, Rue des Paquis, Geneva, Switzerland.

International Telecommunication Union (ITU)

Established: Jan. 1, 1934, when International Telecommunication Convention adopted on Dec. 9, 1932, at Madrid Conference became effective.

Purposes: To maintain and extend international co-operation for improvement and rational use of all kinds of telecommunication and to promote development and most efficient operation of technical facilities.

Headquarters: Palais Willson, Rue de Paquis, Geneva, Switzerland.

International Trade Organization (ITO)

Established: Will not come into existence until sufficient number of countries have ratified Havana Charter drawn up by U. N. Conference on Trade and Employment at Havana, Cuba, Nov. 21, 1947, to Mar. 24, 1948. (Interim Commission established by Conference will cease to exist after ITO comes into being.)

Purposes: To promote expansion of world trade and removal of trade barriers.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Established: Nov. 4, 1946, when 20th signatory to constitution deposited instrument of acceptance with government of United Kingdom.

Purposes: To promote collaboration among nations through education, science and culture in order to further justice,

rule of law and human rights and freedoms without distinction of race, sex, language or religion.

Headquarters: 19 Ave. Kléber, Paris, 16, France.

Universal Postal Union (UPU)

Established: Oct. 9, 1874, by Postal Convention of Bern, Switzerland, effective July 1, 1875.

Purposes: To assure organization and perfection of various postal services and to promote development of international collaboration. To this end, member countries are united in single postal territory for reciprocal exchange of mail.

Headquarters: Schwarztorstrasse 38, Bern, Switzerland.

World Health Organization (WHO)

Established: Apr. 7, 1948, when 26 members of the United Nations ratified constitution adopted July 22, 1945, by International Health Conference in New York City.

Purposes: To aid attainment by all peoples of highest possible level of health.

Headquarters: Palais des Nations, Geneva, Switzerland.

World Meteorological Organization (WMO)

Established: Mar. 23, 1950, 30 days after deposit with government of U. S. of 30th instrument of ratification of or accession to convention adopted in Washington, D. C., Oct. 11, 1947, by twelfth Conference of Directors of International Meteorological Organization (IMO). (IMO, with headquarters in Lausanne, Switzerland, will continue to function until WMO begins to operate.)

Purposes: To co-ordinate, standardize and improve world meteorological activities.

Countries Rejected for U. N. Membership

Country	Date of vote	Vote*
Albania.....	Aug. 29, 1946	5-3-3
Albania.....	Aug. 18, 1947	3-4-4
Albania.....	Sept. 15, 1949	2-1-8
Austria.....	Aug. 21, 1947	8-1-2†
Austria.....	Sept. 13, 1949	9-2-0†
Bulgaria.....	Aug. 21, 1947	1-1-9
Bulgaria.....	Oct. 1, 1947	1-3-7
Bulgaria.....	Sept. 15, 1949	3-1-7
Ceylon.....	Aug. 18, 1948	9-2-0†
Ceylon.....	Dec. 15, 1948	9-2-0†
Ceylon.....	Sept. 13, 1949	9-2-0†
Finland.....	Oct. 1, 1947	9-2-0†
Finland.....	Sept. 13, 1949	9-2-0†
Hungary.....	Aug. 21, 1947	1-1-9
Hungary.....	Oct. 1, 1947	5-0-6
Hungary.....	Sept. 15, 1949	3-1-7
Ireland.....	Aug. 29, 1946	9-1-1†
Ireland.....	Aug. 18, 1947	9-1-1†
Ireland.....	Sept. 13, 1949	9-2-0†

Country	Date of vote	Vote*
Israel†.....	Dec. 17, 1948	5-1-5
Italy.....	Aug. 21, 1947	9-1-1†
Italy.....	Oct. 1, 1947	9-2-0†
Italy.....	Apr. 10, 1948	9-2-0†
Italy.....	Sept. 13, 1949	9-2-0†
Jordan.....	Aug. 29, 1946	8-2-1†
Jordan.....	Aug. 18, 1947	9-1-1†
Jordan.....	Sept. 13, 1949	9-2-0†
Korea, Rep. of.....	Apr. 8, 1949	9-2-0†
Mongolian People's Rep....	Aug. 29, 1946	6-3-2
Mongolian People's Rep....	Aug. 18, 1947	3-3-5
Mongolian People's Rep....	Sept. 15, 1949	2-2-7
Nepal.....	Sept. 7, 1949	9-2-0†
Portugal.....	Aug. 29, 1946	8-2-1†
Portugal.....	Aug. 18, 1947	9-2-0†
Portugal.....	Sept. 13, 1949	9-2-0†
Rumania.....	Aug. 21, 1947	1-0-10
Rumania.....	Oct. 1, 1947	4-0-7
Rumania.....	Sept. 15, 1949	3-1-7

* Security Council vote: for—against—abstaining. Unless vetoed, acceptance requires seven affirmative votes.

† Voted by U.S.S.R. ‡ Subsequently approved for membership.

NOBEL PRIZES

The Nobel prizes are awarded under the will of Alfred Bernhard Nobel, Swedish chemist and engineer, who died in 1896. The interest of the fund is divided annually among the persons who have made the most outstanding contributions in the field of physics, chemistry, and physiology or medicine, who have produced the most distinguished literary work of an idealist tendency, and who have contributed most toward world peace.

The prizes for physics and chemistry are awarded by the Swedish Academy of Science in Stockholm, the one for physiology or medicine by the Caroline Medical Institute in Stockholm, that for literature by the academy in Stockholm, and that for peace by a committee of five elected by the Norwegian Storting. The distribution of prizes was begun on December 10, 1901, the anniversary of Nobel's death. The amount of each prize varies with the income from the fund and since 1936 has stood at approximately £8,000.

Year	Literature	Peace
1901	René F. A. Sully Prudhomme (France)	Henri Dunant (Switzerland) and Frederick Passy (France)
1902	Theodor Mommsen (Germany)	Elie Ducommun and Albert Gobat (Switzerland)
1903	Björnstjerne Björnson (Norway)	Sir William R. Cremer (England)
1904	Frédéric Mistral (France) and José Echegaray (Spain)	Institut de Droit International (Belgium)
1905	Henryk Sienkiewicz (Poland)	Bertha von Suttner (Austria)
1906	Giosuè Carducci (Italy)	Theodore Roosevelt (U. S.)
1907	Rudyard Kipling (England)	Ernesto T. Moneta (Italy) and Louis Renault (France)
1908	Rudolf Eucken (Germany)	Klas P. Arnoldson (Sweden) and Frederik Bajer (Denmark)
1909	Selma Lagerlöf (Sweden)	Auguste M. F. Beernaert (Belgium) and Baron Paul H. B. d'Estournelles de Constant de Rebecque (France)
1910	Paul von Heyse (Germany)	The Bureau International Permanent de la Paix (Switzerland)
1911	Maurice Maeterlinck (Belgium)	Tobias M. C. Asser (Holland) and Alfred H. Fried (Austria)
1912	Gerhart Hauptmann (Germany)	Elihu Root (U. S.)
1913	Rabindranath Tagore (India)	Henri La Fontaine (Belgium)
1915	Romain Rolland (France)	No award
1916	Verner von Heidenstam (Sweden)	No award
1917	Karl Gjellerup (Denmark) and Henrik Pontoppidan (Denmark)	International Red Cross
1919	Carl Spitteler (Switzerland)	Woodrow Wilson (U. S.)
1920	Knut Hamsun (Norway)	Léon Bourgeois (France)
1921	Anatole France (France)	Karl H. Branting (Sweden) and Christian L. Lange (Norway)
1922	Jacinto Benavente (Spain)	Fridtjof Nansen (Norway)
1923	William B. Yeats (Ireland)	No award
1924	Wladyslaw Reymont (Poland)	No award
1925	George Bernard Shaw (England)	Sir Austen Chamberlain (England) and Charles G. Dawes (U. S.)
1926	Grazia Deledda (Italy)	Aristide Briand (France) and Gustav Stresemann (Germany)
1927	Henri Bergson (France)	Ferdinand Buisson (France) and Ludwig Quidde (Germany)
1928	Sigrid Undset (Norway)	No award
1929	Thomas Mann (Germany)	Frank B. Kellogg (U. S.)
1930	Sinclair Lewis (U. S.)	Lars O. J. Söderblom (Sweden)
1931	Erik A. Karlfeldt (Sweden)	Jane Addams (U. S.) and Nicholas M. Butler (U. S.)
1932	John Galsworthy (England)	No award
1933	Ivan G. Bunin (Russia)	Sir Norman Angell (England)
1934	Luigi Pirandello (Italy)	Arthur Henderson (England)
1935	No award	Carl von Ossietzky (Germany)
1936	Eugene O'Neill (U. S.)	Carlos de S. Lamas (Argentina)
1937	Roger Martin du Gard (France)	Lord Cecil of Chelwood (England)
1938	Pearl S. Buck (U. S.)	Office International Nansen pour les Réfugiés (Switzerland)
1939	Frans Eemil Sillanpää (Finland)	No award

Nobel Prizes—(cont.)

Year	Literature	Peace
1944	Johannes V. Jensen (Denmark)	International Red Cross
1945	Gabriela Mistral (Chile)	Cordell Hull (U. S.)
1946	Hermann Hesse (Switzerland)	Emily G. Balch and John R. Mott (U. S.)
1947	André Gide (France)	American Friends Service Committee (U. S.) and British Society of Friends' Service Council (England)
1948	Thomas Stearns Eliot (England)	No award
1949	William Faulkner	Lord John Boyd Orr (Scotland)

Year	Physics	Chemistry	Medicine
1901	Wilhelm K. Roentgen, for discovery of Roentgen rays.	Jacobus H. van 't Hoff; discovery of laws of chemical dynamics and osmotic pressure in solutions.	Emil A. von Behring, for work on serum therapy against diphtheria.
1902	Hendrik A. Lorentz and Pieter Zeeman, for work on influence of magnetism upon radiation.	Emil Fischer, for experiments in sugar and purin groups of substances.	Sir Ronald Ross, for work on malaria.
1903	A. Henri Becquerel, work on discovery of spontaneous radioactivity. Pierre and Marie Curie, for investigation of phenomena of radiation.	Svante A. Arrhenius, for his electrolytic theory of dissociation.	Niels R. Finsen, for his treatment of lupus vulgaris, with concentrated light rays.
1904	John Strutt (Lord Rayleigh) for discovery of argon in investigating gas density.	Sir William Ramsay; discovery and determination of place of inert gaseous elements in air.	Ivan P. Pavlov, for work on the physiology of digestion.
1905	Philipp Lenard, for work with cathode rays.	Adolf von Baeyer, for work on organic dyes and hydroaromatic combinations.	Robert Koch, for work on tuberculosis.
1906	Joseph J. Thomson, for investigations on passage of electricity through gases.	Henri Moissan, for isolation of fluorine, and introduction of electric furnace.	Camillo Golgi and Santiago Ramón y Cajal, for work on structure of the nervous system.
1907	Albert A. Michelson, for spectroscopic and meteorologic investigations.	Eduard Buchner; discovery of cell-less fermentation and investigations in biological chem.	Charles L. A. Laveran, for work with protozoa in the generation of disease.
1908	Gabriel Lippmann, for method of reproducing colors by photography.	Ernest Rutherford, for investigations into disintegration of elements and chemistry of radioactive substances.	Paul Ehrlich and Élie Metchnikoff, for work on immunity.
1909	Guglielmo Marconi and Ferdinand Braun, for development of wireless.	Wilhelm Ostwald, for work on catalysis and investigations into principles governing chemical equilibrium and reaction rates.	Theodor Kocher, for work on the thyroid gland.
1910	Johannes D. van der Waals, for work with the equation of state for gases and liquids.	Otto Wallach, for work in the field of alicyclic compounds.	Albrecht Kossel, for achievements in the chemistry of the cell.
1911	Wilhelm Wien, for his laws governing the radiation of heat.	Marie Curie, for discovery of elements radium and polonium.	Allvar Gullstrand, for work on the dioptrics of the eye.
1912	Gustaf Dalén, for discovery of automatic regulators used in lighting lighthouses and light buoys.	Victor Grignard, for reagent discovered by and named after him; and Paul Sabatier, for the methods of hydrogenating organic compounds.	Alexis Carrel, for work on vascular ligature and grafting of blood vessels and organs.

Year	Physics	Chemistry	Medicine
1913	H. Kamerlingh Onnes, for work leading to production of liquid helium.	Alfred Werner, for linking up atoms within the molecule.	Charles Richet, for work on anaphylaxy.
1914	Max von Laue, for discovery of defraction of Roentgen rays passing through crystals.	Theodore W. Richards, for determining atomic weight of many chemical elements.	Robert Bárány, for work on physiology and pathology of the vestibular system.
1915	W. H. Bragg and W. L. Bragg, for analysis of crystal structure by means of X rays.	Richard Willstätter, for research into coloring matter of plants, especially chlorophyll.	No award.
1917	Charles G. Barkla, discovery of Roentgen radiation of the elements.	No award.	No award.
1918	Max Planck, for discoveries in connection with quantum theory.	Fritz Haber, for synthetic production of ammonia.	No award.
1919	Johannes Stark, discovery of Doppler effect in Canal rays and decomposition of spectrum lines by electric fields.	No award.	Jules Bordet, for discoveries in connection with immunity.
1920	Charles E. Guillaume, for discoveries of anomalies in nickel steel alloys.	Walther Nernst, for work in thermochemistry.	August Krogh, discovery of regulation of capillaries' motor mechanism.
1921	Albert Einstein, for discovery of the law of the photoelectric effect.	Frederick Soddy, for investigations into origin and nature of isotopes.	No award.
1922	Niels Bohr, for investigations of structure of atoms and radiations emanating from them.	Francis W. Aston, for discovery of isotopes in nonradioactive elements and for discovery of the whole number rule.	In 1923 the 1922 prize was divided between Archibald V. Hill for discovery relating to heat-production in muscles; and Otto Meyerhof, for correlation between consumption of oxygen and production of lactic acid in muscles.
1923	Robert A. Millikan, work on elementary charge of electricity and photoelectric phenomena.	Fritz Pregl, for method of microanalysis of organic substances discovered by him.	Frederick G. Banting and John J. R. Macleod, for discovery of insulin.
1924	Karl M. G. Siegbahn, for investigations in X-ray spectroscopy.	No award.	Willem Einthoven, for discovering the mechanism of the electrocardiogram.
1925	James Franck and Gustav Hertz, for discovery of laws governing impact of electrons upon atoms.	In 1926 the 1925 prize was awarded to Richard Zsigmondy, for work on the heterogeneous nature of colloid solutions.	No award.
1926	Jean Perrin, for works on discontinuous structure of matter and discovery of the equilibrium of sedimentation.	The Svedberg, for work on disperse systems.	Johannes Fibiger, for discovery of the Spiroptera carcinoma.
1927	Arthur H. Compton, discovery of Compton phenomenon; and Charles T. R. Wilson, for method of perceiving paths taken by electrically charged particles.	In 1928 the 1927 prize was awarded to Heinrich Wieland, for investigations of bile acids and kindred substances.	Julius Wagner-Jauregg, for use of malaria inoculation in treatment of dementia paralytica.

Nobel Prizes—(cont.)

Year	Physics	Chemistry	Medicine
1928	In 1929 the 1928 prize was awarded to Owen W. Richardson, for work on the phenomenon of thermionics and discovery of the Richardson Law.	Adolf Windaus, for investigations on constitution of the sterols and their connection with vitamins.	Charles Nicolle, for work on typhus exanthematicus.
1929	Prince Louis Victor de Broglie, for discovery of the wave character of electrons.	Arthur Harden and Hans K. A. S. von Euler-Chelpin, for research of fermentation of sugars.	Christiaan Eijkman, for discovery of the antineuritic vitamins; and Sir Frederick G. Hopkins, for discovery of growth-promoting vitamins.
1930	Sir Chandrasekhara V. Raman, for work on diffusion of light and discovery of the Raman effect.	Hans Fischer, for work on coloring matter of blood and leaves and for his synthesis of hemin.	Karl Landsteiner, for discovery of human blood groups.
1931	No award.	Karl Bosch and Friedrich Bergius, for invention and development of chemical high-pressure methods.	Otto H. Warburg, for discovery of the character and mode of action of the respiratory ferment.
1932	In 1933 the prize for 1932 was awarded to Werner Heisenberg, for creation of the quantum mechanics.	Irving Langmuir, for work in realm of surface chemistry.	Sir Charles S. Sherrington and Edgar D. Adrian, for discoveries of the function of the neuron.
1933	Erwin Schrödinger and Paul A. M. Dirac, for discovery of new fertile forms of the atomic theory.	No award.	Thomas H. Morgan, for discoveries on hereditary function of the chromosomes.
1934	No award.	Harold C. Urey, for discovery of heavy hydrogen.	George H. Whipple, George R. Minot, and William P. Murphy, for discovery of liver therapy against anemias.
1935	James Chadwick, for discovery of the neutron.	Frédéric and Irène Joliot-Curie, for synthesis of new radioactive elements.	Hans Spemann, for discovery of the organizer-effect in embryonic development.
1936	Victor F. Hess, for discovery of cosmic radiation; and Carl D. Anderson, for discovery of the positron.	Peter J. W. Debye, for investigations on dipole moments and diffraction of X rays and electrons in gases.	Sir Henry H. Dale and Otto Loewi, for discoveries on chemical transmission of nerve impulses.
1937	Clinton J. Davisson and George P. Thomson, for discovery of diffraction of electrons by crystals.	Walter N. Haworth, for research on carbohydrates and vitamin C; and Paul Karrer, for work on carotenoids, flavins and vitamins A and B.	Albert Szent-Györgyi von Nagrapolt, for discoveries on biological combustion.
1938	Enrico Fermi, for identification of new radioactivity elements and discovery of nuclear reactions effected by slow neutrons.	Richard Kuhn, for carotinoid study and vitamin research (declined the prize).	Corneille Heymans, for importance of sinus and aorta mechanisms in the regulation of respiration.

Year	Physics	Chemistry	Medicine
1939	Ernest Orlando Lawrence, for the development of the cyclotron.	Adolf Friedrich Johann Butenandt, for work on sexual hormones (declined the prize) and Leopold Ružicka, work with polymylenes.	Gerhard Domagk, antibacterial effect of pron-tocilate.
1943	Otto Stern, for detection of magnetic momentum of protons.	George Hevesy De Heves, for work on use of isotopes as chemical indicators.	Henrik Dam, Edward A. Doisy for the discovery of the chemical nature of Vitamin K.
1944	Isidor Isaac Rabi, for work on magnetic movements of atomic particles.	Otto Hahn, for work on atomic fission.	Joseph Erlanger and Herbert Spencer Gasser, for work on functions of the nerve threads.
1945	Wolfgang Pauli, for work on atomic fissions.	Artturi Ilmari Virtanen, for research in the field of conservation of fodder.	Sir Alexander Fleming, Ernst Boris Chain, and Sir Howard Florey, for discovery of penicillin.
1946	Percy Williams Bridgman, studies and inventions in high-pressure physics.	James B. Sumner, crystallizing of enzymes. John H. Northrop and Wendell M. Stanley, preparing enzymes and virus proteins in pure form.	Herman J. Muller, hereditary effects of X ray on genes.
1947	Sir Edward Appleton, for discovery of layer which reflects radio short waves in the ionosphere.	Sir Robert Robinson, for research in plant substances.	Carl F. and Gerty T. Cori, for work on animal starch metabolism; Bernardo A. Houssay, for hormone study of pituitary gland.
1948	Patrick M. S. Blackett, for improvement on Wilson chamber and for discoveries in cosmic radiation.	Arne Tiselius, for biochemical discoveries and isolation of mouse paralysis virus.	Paul Mueller, for discovery of insect-killing properties of DDT.
1949	Hideki Yukawa, for mathematical prediction, 14 years ago, of the meson.	William Francis Glauque, for research in thermodynamics, especially effects of low temperature.	Walter Rudolf Hess, for research on brain control of body; and Antonio Caetano de Abreu Freire Egas Moniz, for development of brain operation to treat mental disease.

(For 1950 Nobel Prize winners, see Nobel Prizes in Index.)

The Hall of Fame

The Hall of Fame for Great Americans, established in 1900 on the campus of New York University, is an open-air colonnade containing busts of 76 of the 83 persons so far honored for national achievements. New names are voted on every five years by a committee of 100 men and women from all the states. To be elected to the Hall of Fame, an individual must have been dead more than 25 years (before 1922, the stipulation was 10 years), must have been a citizen of the U. S. through birth or naturalization, and must receive three-fifths of the committee vote. Nominations may be made by any U. S. citizen. The last election was held in 1950.

Names	Elected	Names	Elected
John Adams (statesman)	1900	Edwin Booth (actor)	1925
John Quincy Adams (statesman)	1905	Phillips Brooks (clergyman)	1910
Louis Agassiz (naturalist)	1915	William Cullen Bryant (poet)	1910
Susan B. Anthony* (reformer)	1950	William Ellery Channing (clergyman)	1900
John James Audubon (naturalist)	1900	Rufus Choate (lawyer)	1915
George Bancroft (historian)	1910	Henry Clay (statesman)	1900
Henry Ward Beecher (clergyman)	1900	Samuel L. Clemens (Mark Twain)	
Alexander Graham Bell* (inventor)	1950	(author)	1920
Daniel Boone (explorer)	1915	Grover Cleveland (statesman)	1935

The Hall of Fame—(cont.)

Names	Elected	Names	Elected
James Fenimore Cooper (author)	1910	Horace Mann (educator)	1900
Peter Cooper (manufacturer)	1900	John Marshall (jurist)	1900
Charlotte S. Cushman (actress)	1915	Matthew F. Maury (oceanographer)	1930
James Buchanan Eads (engineer)	1920	Maria Mitchell (astronomer)	1905
Jonathan Edwards (clergyman)	1900	James Monroe (statesman)	1930
Ralph Waldo Emerson (author)	1900	Samuel F. B. Morse (inventor)	1900
David G. Farragut (naval officer)	1900	William T. G. Morton (dentist)	1920
Stephen C. Foster (song composer)	1940	John Lothrop Motley (historian)	1910
Benjamin Franklin (statesman)	1900	Simon Newcomb (astronomer)	1935
Robert Fulton (inventor)	1900	Thomas Paine* (philosopher)	1945
Josiah Willard Gibbs* (physicist)	1950	Alice Freeman Palmer (educator)	1920
William Crawford Gorgas* (physician)	1950	Francis Parkman (historian)	1915
Ulysses S. Grant (statesman)	1900	George Peabody (merchant)	1900
Asa Gray (botanist)	1900	William Penn (colonizer)	1935
Alexander Hamilton (statesman)	1915	Edgar Allan Poe (author)	1910
Nathaniel Hawthorne (author)	1900	Walter Reed (surgeon)	1945
Joseph Henry (physicist)	1915	Theodore Roosevelt* (statesman)	1950
Patrick Henry (statesman)	1920	Augustus Saint-Gaudens (sculptor)	1920
Oliver Wendell Holmes (author)	1910	William T. Sherman (army officer)	1905
Mark Hopkins (educator)	1915	Joseph Story (jurist)	1900
Elias Howe (inventor)	1915	Harriet Beecher Stowe (author)	1910
Washington Irving (author)	1900	Gilbert Charles Stuart (painter)	1900
Andrew Jackson (statesman)	1910	Booker T. Washington (educator)	1945
Thomas Jefferson (statesman)	1900	George Washington (statesman)	1900
John Paul Jones (naval officer)	1925	Daniel Webster (statesman)	1900
James Kent (jurist)	1900	J. A. McNeill Whistler (painter)	1930
Sidney Lanier (poet)	1945	Walt Whitman (poet)	1930
Robert E. Lee (military officer)	1900	Eli Whitney (inventor)	1900
Abraham Lincoln (statesman)	1900	John Greenleaf Whittier (poet)	1905
Henry W. Longfellow (poet)	1900	Emma Willard (educator)	1905
James Russell Lowell (poet)	1905	Frances Elizabeth Willard (reformer)	1910
Mary Lyon (educator)	1905	Roger Williams (clergyman)	1920
James Madison (statesman)	1905	Woodrow Wilson* (statesman)	1950

* Not yet represented by a bust. NOTE: In the 1950 election, the following persons received over 10 votes but did not receive the necessary two-thirds of the committee vote: Andrew Carnegie (industrialist), Dorothea Lynde Dix (reformer), Henry George (political economist), Thomas Jonathan (Stonewall) Jackson (military officer), Henry James (author), William James (psychologist), Henry David Thoreau (author), George Westinghouse (inventor), Wilbur Wright (inventor).

Pulitzer Prize Awards, 1917 to 1949

Source: Columbia University, New York.

Pulitzer Prizes in Journalism

Meritorious Public Service

1917 No award
 1918 *The New York Times*
 1919 *Milwaukee Journal*
 1920 No award
 1921 *Boston Post*
 1922 *The (N. Y.) World*
 1923 *Memphis Commercial Appeal*
 1924 *The (N. Y.) World*
 1925 No award
 1926 *The (Columbus, Ga.) Enquirer Sun*
 1927 *Canton (Ohio) Daily News*
 1928 *Indianapolis Times*
 1929 *The (N. Y.) Evening World*
 1930 No award
 1931 *Atlanta Constitution*
 1932 *Indianapolis News*
 1933 *New York World-Telegram*
 1934 *Medford (Oreg.) Mail Tribune*
 1935 *The Sacramento Bee*
 1936 *The Cedar Rapids (Iowa) Gazette*
 1937 *St. Louis Post-Dispatch*
 1938 *The Bismarck (N. Dak.) Tribune*
 Special Bronze Plaque:
Edmonton (Alberta) Journal

1939 *The Miami Daily News*
 1940 *Waterbury (Conn.) Republican and American*
 1941 *St. Louis Post-Dispatch*
 1942 *Los Angeles Times*
 1943 *The (Omaha) World-Herald*
 1944 *The New York Times*
 1945 *The Detroit Free Press*
 1946 *The Scranton (Pa.) Times*
 1947 *The (Baltimore) Sun*
 1948 *The St. Louis Post-Dispatch*
 1949 *The (Lincoln) Nebraska State Journal*
 1950 *Chicago Daily News and The St. Louis Post-Dispatch*

Editorial

1917 *New York Tribune*
 1918 *The (Louisville, Ky.) Courier-Journal*
 1919 No award
 1920 HARVEY E. NEWBRANCH ([Omaha] *Evening World-Herald*)
 1921 No award
 1922 FRANK M. O'BRIEN (*The New York Herald*)

- 1923 WILLIAM ALLEN WHITE (*The Emporia [Kans.] Gazette*)
- 1924 *The Boston Herald*
Special prize: FRANK I. COBB (*The [N. Y.] World*)
- 1925 *Charleston (S. C.) News and Courier*
- 1926 *The New York Times* (EDWARD M. KINGSBURY)
- 1927 *The Boston Herald* (F. LAURISTON BULLARD)
- 1928 GROVER CLEVELAND HALL (*Montgomery [Ala.] Advertiser*)
- 1929 LOUIS ISAAC JAFFE (*Norfolk Virginian-Pilot*)
- 1930 No award
- 1931 CHARLES S. RYCKMAN (*Fremont [Nebr.] Tribune*)
- 1932 No award
- 1933 *The Kansas City (Mo.) Star*
- 1934 E. P. CHASE (*Atlantic [Iowa] News Telegraph*)
- 1935 No award
- 1936 FELIX MORLEY (*The Washington [D. C.] Post*)
GEORGE B. PARKER (*The Scripps-Howard Newspapers*)
- 1937 JOHN W. OWENS (*The [Baltimore] Sun*)
- 1938 W. W. WAYMACK (*The [Des Moines] Register and Tribune*)
- 1939 RONALD G. CALLVERT (*The [Portland] Oregonian*)
- 1940 BART HOWARD (*St. Louis Post-Dispatch*)
- 1941 REUBEN MAURY (*[N. Y.] Daily News*)
- 1942 GEOFFREY PARSONS (*New York Herald Tribune*)
- 1943 FORREST W. SEYMOUR (*The [Des Moines] Register and Tribune*)
- 1944 *The Kansas City (Mo.) Star* (HENRY J. HASKELL)
- 1945 GEORGE W. POTTER (*The Providence [R. I.] Journal-Bulletin*)
- 1946 HODDING CARTER (*The [Greenville, Miss.] Delta Democrat-Times*)
- 1947 WILLIAM H. GRIMES (*The [N. Y.] Wall Street Journal*)
- 1948 VIRGINIUS DABNEY (*Richmond Times-Dispatch*)
- 1949 JOHN H. CRIDER (*The Boston Herald*)
HERBERT ELLISTON (*The Washington Post*)
- 1950 CARL M. SAUNDERS (*Jackson [Mich.] Citizen Patriot*)
- Correspondence
- 1929 PAUL SCOTT MOWRER (*Chicago Daily News*)
- 1930 LELAND STOWE (*New York Herald Tribune*)
- 1931 H. R. KNICKERBOCKER (*Philadelphia Public Ledger and New York Evening Post*)
- 1932 WALTER DURANTY (*The New York Times*)
CHARLES G. ROSS (*St. Louis Post-Dispatch*)
- 1933 EDGAR ANSEL MOWRER (*Chicago Daily News*)
- 1934 FREDERICK T. BIRCHALL (*The New York Times*)
- 1935 ARTHUR KROCK (*The New York Times*)
- 1936 WILFRED C. BARBER (*The Chicago Tribune*)
- 1937 ANNE O'HARE MCCORMICK (*The New York Times*)
- 1938 ARTHUR KROCK (*The New York Times*)
- 1939 LOUIS P. LOCHNER (*The Associated Press*)
- 1940 OTTO D. TOLISCHUS (*The New York Times*)
- 1941 Group award *
- 1942 CARLOS P. ROMULO (*The [Manilla] Philippines Herald*)
- 1943 HANSON W. BALDWIN (*The New York Times*)
- 1944 ERNIE PYLE (*Scripps-Howard Newspaper Alliance*)
- 1945 HAROLD V. (HAL) BOYLE (*The Associated Press*)
- 1946 ARNALDO CORTESI (*The New York Times*)
- 1947 BROOKS ATKINSON (*The New York Times*)
- 1948 Discontinued
- Cartoon
- 1922 ROLLIN KIRBY (*The [N. Y.] World*)
- 1923 No award
- 1924 JAY NORWOOD DARLING (*New York Tribune*)
- 1925 ROLLIN KIRBY (*The [N. Y.] World*)
- 1926 D. R. FITZPATRICK (*St. Louis Post-Dispatch*)
- 1927 NELSON HARDING (*Brooklyn Daily Eagle*)
- 1928 NELSON HARDING (*Brooklyn Daily Eagle*)
- 1929 ROLLIN KIRBY (*The [N. Y.] World*)
- 1930 CHARLES R. MACAULEY (*Brooklyn Daily Eagle*)
- 1931 EDMUND DUFFY (*The [Baltimore] Sun*)
- 1932 JOHN T. MCCUTCHEON (*The Chicago Tribune*)
- 1933 HAROLD MORTON TALBUT (*Washington Daily News*)
- 1934 EDMUND DUFFY (*The [Baltimore] Sun*)
- 1935 ROSS A. LEWIS (*Milwaukee Journal*)
- 1936 No award
- 1937 CLARENCE DANIEL BATCHELOR (*[N. Y.] Daily News*)
- 1938 VAUGHN SHOEMAKER (*Chicago Daily News*)
- 1939 CHARLES G. WERNER (*The [Oklahoma City] Daily Oklahoman*)
- 1940 EDMUND DUFFY (*The [Baltimore] Sun*)
- 1941 JACOB BURCK (*The [Chicago] Times*)
- 1942 HERBERT LAWRENCE BLOCK (*NEA Service*)
- 1943 JAY NORWOOD DARLING (*New York Herald Tribune*)
- * In place of an individual Pulitzer Prize for foreign correspondence, the Trustees approved the recommendation of the Advisory Board that a bronze plaque or scroll be designed and executed to recognize and symbolize the public services and the individual achievements of American news reporters in the war zones of Europe, Asia and Africa from the beginning of the war

- 1944 CLIFFORD K. BERRYMAN (*The Washington* [D. C.] *Evening Star*)
 1945 BILL MAULDIN (United Feature Syndicate, Inc.)
 1946 BRUCE ALEXANDER RUSSELL (*Los Angeles Times*)
 1947 VAUGHN SHOEMAKER (*Chicago Daily News*)
 1948 RUBE GOLDBERG (*The* [N. Y.] *Sun*)
 1949 LUTE PEASE (*The Newark Evening News*)
 1950 JAMES T. BERRYMAN (*Washington* [D. C.] *Evening Star*)

News Photography

- 1942 MILTON BROOKS (*The Detroit News*)
 1943 FRANK NOEL (*The Associated Press*)
 1944 FRANK FILAN (*The Associated Press*)
 EARLE L. BUNKER (*The* [Omaha] *World-Herald*)
 1945 JOE ROSENTHAL (*The Associated Press*)
 1946 No award
 1947 ARNOLD HARDY
 1948 FRANK CUSHING (*Boston Traveler*)
 1949 NAT FEIN (*N. Y. Herald Tribune*)
 1950 BILL CROUCH (*Oakland* [Calif.] *Tribune*)

National Telegraphic Reporting

- 1942 LOUIS STARK (*The New York Times*)
 1943 No award
 1944 DEWEY L. FLEMING (*The* [Baltimore] *Sun*)
 1945 JAMES B. RESTON (*The New York Times*)
 1946 EDWARD A. HARRIS (*St. Louis Post-Dispatch*)
 1947 EDWARD T. FOLLIARD (*The Washington* [D. C.] *Post*)

National Reporting

- 1948 BERT ANDREWS (*New York Herald Tribune*)
 NAT S. FINNEY (*The Minneapolis Tribune*)
 1949 C. P. TRUSSELL (*The N. Y. Times*)
 1950 EDWIN O. GUTHMAN (*Seattle Times*)

International Telegraphic Reporting

- 1942 LAURENCE EDMUND ALLEN (*The Associated Press*)
 1943 IRA WOLFERT (North American Newspaper Alliance, Inc.)
 1944 DANIEL DE LUCE (*The Associated Press*)
 1945 MARK S. WATSON (*The* [Baltimore] *Sun*)
 1946 HOMER W. BIGART (*New York Herald Tribune*)
 1947 EDDY GILMORE (*The Associated Press*)

International Reporting

- 1948 PAUL W. WARD (*The* [Baltimore] *Sun*)
 1949 PRICE DAY (*The* [Baltimore] *Sun*)
 1950 EDMUND STEVENS (*Christian Science Monitor*)

Reporting

- 1917 HERBERT BAYARD SWOPE (*The* [N. Y.] *World*)

- 1918 HAROLD A. LITLEDAL (*New York Evening Post*)
 1919 No award
 1920 JOHN J. LEARY, JR. (*The* [N. Y.] *World*)
 1921 LOUIS SEIBOLD (*The* [N. Y.] *World*)
 1922 KIRKE L. SIMPSON (*The Associated Press*)
 1923 ALVA JOHNSTON (*The New York Times*)
 1924 MAGNER WHITE (*San Diego Sun*)
 1925 JAMES W. MULROY and ALVIN H. GOLDSTEIN (*Chicago Daily News*)
 1926 WILLIAM BURKE MILLER (*The* [Louisville, Ky.] *Courier-Journal*)
 1927 JOHN T. ROGERS (*St. Louis Post-Dispatch*)
 1928 No award
 1929 PAUL Y. ANDERSON (*St. Louis Post-Dispatch*)
 1930 RUSSELL D. OWEN (*The New York Times*)
 Special award: W. O. DAPPING (*Auburn* [N. Y.] *Citizen*)
 1931 A. B. MACDONALD (*The Kansas City* [Mo.] *Star*)
 1932 W. C. RICHARDS, D. D. MARTIN, J. S. POOLER, F. D. WEBB, J. N. W. SLOAN (all of *The Detroit Free Press*)
 1933 FRANCIS A. JAMIESON (*The Associated Press*)
 1934 ROYCE BRIER (*San Francisco Chronicle*)
 1935 WILLIAM H. TAYLOR (*New York Herald Tribune*)
 1936 LAUREN D. LYMAN (*The New York Times*)
 1937 JOHN J. O'NEILL (*New York Herald Tribune*), WILLIAM LEONARD LAURENCE (*The New York Times*), HOWARD W. BLAKESLEE (*The Associated Press*), GOBIND BEHARI LAL (Universal Service), DAVID DIETZ (*The Scripps-Howard Newspapers*)
 1938 RAYMOND SPRIGLE (*Pittsburgh Post-Gazette*)
 1939 THOMAS L. STOKES (*New York World-Telegram*)
 1940 S. BURTON HEATH (*New York World-Telegram*)
 1941 WESTBROOK PEGLER (*New York World-Telegram*)
 1942 STANTON DELAPLANE (*San Francisco Chronicle*)
 1943 GEORGE WELLER (*Chicago Daily News*)
 1944 PAUL SCHOENSTEIN and associates (*New York Journal-American*)
 1945 JACK S. McDOWELL (*The* [San Francisco] *Call-Bulletin*)
 1946 WILLIAM LEONARD LAURENCE (*The New York Times*)
 1947 FREDERICK WOLTMAN (*New York World-Telegram*)

Local Reporting

- 1948 GEORGE E. GOODWIN (*The Atlanta Journal*)
 1949 MALCOLM JOHNSON (*The* [N. Y.] *Sun*)
 1950 MEYER BERGER (*The New York Times*)

Special Citation

- 1941 *The New York Times* for the public educational value of its foreign news report, exemplified by its scope, by excellence of writing and presentation, and supplementary background information, illustration, and interpretation.
- 1944 BYRON PRICE, Director of the Office of Censorship, for the creation and administration of the newspaper and radio codes.
- 1945 MRS. WILLIAM ALLEN WHITE, for her husband's interest and services during the past seven years as a member of the Advisory Board of the Graduate School of Journalism, Columbia University. The cartographers of the American press whose maps of the

war fronts have helped notably to clarify and increase public information on the progress of the Armies and Navies.

- 1947 (Pulitzer centennial year.) Columbia University and the Graduate School of Journalism, for their efforts to maintain and advance the high standards governing the Pulitzer Prize awards. The St. Louis *Post-Dispatch*, for its unswerving adherence to the public and professional ideals of its founder and its constructive leadership in the field of American journalism.
- 1948 DR. FRANK D. FACKENTHAL, for his interest and service during the past years.

History of the Services Rendered to the Public by the American Press during Preceding Year
1918 MINNA LEWISON and HENRY BEETLE HOUGH

Pulitzer Prizes in Letters

Novel

- 1917 No award
- 1918 *His Family*. By ERNEST POOLE
- 1919 *The Magnificent Ambersons*. By BOOTH TARKINGTON
- 1920 No award
- 1921 *The Age of Innocence*. By EDITH WHARTON
- 1922 *Alice Adams*. By BOOTH TARKINGTON
- 1923 *One of Ours*. By WILLA CATHER
- 1924 *The Able McLaughlins*. By MARGARET WILSON
- 1925 *So Big*. By EDNA FERBER
- 1926 *Arrowsmith*. By SINCLAIR LEWIS
- 1927 *Early Autumn*. By LOUIS BROMFIELD
- 1928 *The Bridge of San Luis Rey*. By THORNTON WILDER
- 1929 *Scarlet Sister Mary*. By JULIA PETERKIN
- 1930 *Laughing Boy*. By OLIVER LA FARCE
- 1931 *Years of Grace*. By MARGARET AYER BARNES
- 1932 *The Good Earth*. By PEARL S. BUCK
- 1933 *The Store*. By T. S. STRIBLING
- 1934 *Lamb in His Bosom*. By CAROLINE MILLER
- 1935 *Now in November*. By JOSEPHINE WINSLOW JOHNSON
- 1936 *Honey in the Horn*. By HAROLD L. DAVIS
- 1937 *Gone With the Wind*. By MARGARET MITCHELL
- 1938 *The Late George Apley*. By JOHN PHILLIPS MARQUAND
- 1939 *The Yearling*. By MARJORIE KINNAN RAWLINGS
- 1940 *The Grapes of Wrath*. By JOHN STEINBECK
- 1941 No award
- 1942 *In This Our Life*. By ELLEN GLASGOW
- 1943 *Dragon's Teeth*. By UPTON SINCLAIR
- 1944 *Journey in the Dark*. By MARTIN FLAVIN

- 1945 *A Bell for Adano*. By JOHN HERSEY
- 1946 No award
- 1947 *All the King's Men*. By ROBERT PENN WARREN
- 1948 *Tales of the South Pacific*. By JAMES A. MICHENER
- 1949 *Guard of Honor*. By JAMES GOULD COZZENS
- 1950 *The Way West*. By A. B. GUTHRIE, JR.

Drama

- 1917 No award
- 1918 *Why Marry?* By JESSE LYNCH WILLIAMS
- 1919 No award
- 1920 *Beyond the Horizon*. By EUGENE O'NEILL
- 1921 *Miss Lulu Bett*. By ZONA GALE
- 1922 *Anna Christie*. By EUGENE O'NEILL
- 1923 *Icebound*. By OWEN DAVIS
- 1924 *Hell-Bent Fer Heaven*. By HATCHER HUGHES
- 1925 *They Knew What They Wanted*. By SIDNEY HOWARD
- 1926 *Craig's Wife*. By GEORGE KELLY
- 1927 *In Abraham's Bosom*. By PAUL GREEN
- 1928 *Strange Interlude*. By EUGENE O'NEILL
- 1929 *Street Scene*. By ELMER L. RICE
- 1930 *The Green Pastures*. By MARC CONNELLY
- 1931 *Alison's House*. By SUSAN GLASPELL
- 1932 *Of Thee I Sing*. By GEORGE S. KAUFMAN, MORRIE RYSKIND & IRA GERSHWIN
- 1933 *Both Your Houses*. By MAXWELL ANDERSON
- 1934 *Men in White*. By SIDNEY KINGSLEY
- 1935 *The Old Maid*. By ZOE AKINS
- 1936 *Idiot's Delight*. By ROBERT E. SHERWOOD
- 1937 *You Can't Take It With You*. By MOSS HART and GEORGE S. KAUFMAN
- 1938 *Our Town*. By THORNTON WILDER
- 1939 *Abe Lincoln in Illinois*. By ROBERT E. SHERWOOD
- 1940 *The Time of Your Life*. By WILLIAM SAROYAN

- 1941 *There Shall Be No Night*. By ROBERT E. SHERWOOD
 1942 No award
 1943 *The Skin of Our Teeth*. By THORNTON WILDER
 1944 No award
 1945 *Harvey*. By MARY CHASE
 1946 *State of the Union*. By RUSSEL CROUSE and HOWARD LINDSAY
 1947 No award
 1948 *A Streetcar Named Desire*. By TENNESSEE WILLIAMS
 1949 *Death of a Salesman*. By ARTHUR MILLER
 1950 *South Pacific*. By RICHARD RODGERS, OSCAR HAMMERSTEIN II, and JOSHUA LOGAN

History

- 1917 *With Americans of Past and Present Days*. By His Excellency J. J. JUSSE-
 RAND, Ambassador of France to the United States
 1918 *A History of the Civil War, 1861-1865*. By JAMES FORD RHODES
 1919 No award
 1920 *The War with Mexico*. By JUSTIN H. SMITH
 1921 *The Victory at Sea*. By WILLIAM SOWDEN SIMS in collaboration with BURTON J. HENDRICK
 1922 *The Founding of New England*. By JAMES TRUSLOW ADAMS
 1923 *The Supreme Court in United States History*. By CHARLES WARREN
 1924 *The American Revolution—A Constitutional Interpretation*. By CHARLES HOWARD MCILWAIN
 1925 *A History of the American Frontier*. By FREDERIC L. PAXSON
 1926 *The History of the United States*. By EDWARD CHANNING
 1927 *Pinckney's Treaty*. By SAMUEL FLAGG BEMIS
 1928 *Main Currents in American Thought*, 2 vols. By VERNON LOUIS PARRINGTON
 1929 *The Organization and Administration of the Union Army, 1861-1865*. By FRED ALBERT SHANNON
 1930 *The War of Independence*. By CLAUDE H. VAN TYNE
 1931 *The Coming of the War: 1914*. By BERNADOTTE E. SCHMITT
 1932 *My Experiences in the World War*. By JOHN J. PERSHING
 1933 *The Significance of Sections in American History*. By FREDERICK J. TURNER
 1934 *The People's Choice*. By HERBERT AGAR
 1935 *The Colonial Period of American History*. By CHARLES MCLEAN ANDREWS
 1936 *The Constitutional History of the United States*. By ANDREW C. MC-
 LAUGHLIN
 1937 *The Flowering of New England*. By VAN WYCK BROOKS
 1938 *The Road to Reunion, 1865-1900*. By PAUL HERMAN BUCK
 1939 *A History of American Magazines*. By FRANK LUTHER MOTT

- 1940 *Abraham Lincoln: The War Years*. By CARL SANDBURG
 1941 *The Atlantic Migration, 1607-1860*. By MARCUS LEE HANSEN
 1942 *Reveille in Washington*. By MARGARET LEECH
 1943 *Paul Revere and the World He Lived In*. By ESTHER FORBES
 1944 *The Growth of American Thought*. By MERLE CURTI
 1945 *Unfinished Business*. By STEPHEN BONSAI
 1946 *The Age of Jackson*. By ARTHUR M. SCHLESINGER, JR.
 1947 *Scientists Against Time*. By JAMES PHINNEY BAXTER, 3RD
 1948 *Across the Wide Missouri*. By BERNARD DEVOTO
 1949 *The Description of American Democracy*. By ROY FRANKLIN NICHOLS
 1950 *Art and Life in America*. By OLIVER W. LARKIN

Biography

- 1917 *Julia Ward Howe*. By LAURA E. RICHARDS and MAUDE HOWE ELLIOTT assisted by FLORENCE HOWE HALL
 1918 *Benjamin Franklin, Self-Revealed*. By WILLIAM CABELL BRUCE
 1919 *The Education of Henry Adams*. By HENRY ADAMS
 1920 *The Life of John Marshall*. By ALBERT J. BEVERIDGE
 1921 *The Americanization of Edward Bok*. By EDWARD BOK
 1922 *A Daughter of the Middle Border*. By HAMLIN GARLAND
 1923 *The Life and Letters of Walter H. Page*. By BURTON J. HENDRICK
 1924 *From Immigrant to Inventor*. By MICHAEL IDVORSKY PUPIN
 1925 *Barrett Wendell and His Letters*. By M. A. DEWOLFE HOWE
 1926 *The Life of Sir William Osler*. By HARVEY CUSHING
 1927 *Whitman*. By EMORY HOLLOWAY
 1928 *The American Orchestra and Theodore Thomas*. By CHARLES EDWARD RUSSELL
 1929 *The Training of an American. The Earlier Life and Letters of Walter H. Page*. By BURTON J. HENDRICK
 1930 *The Raven*. By MARQUIS JAMES
 1931 *Charles W. Eliot*. By HENRY JAMES
 1932 *Theodore Roosevelt*. By HENRY F. PRINGLE
 1933 *Grover Cleveland*. By ALLAN NEVINS
 1934 *John Hay*. By TYLER DENNETT
 1935 *R. E. Lee*. By DOUGLAS S. FREEMAN
 1936 *The Thought and Character of William James*. By RALPH BARTON PERRY
 1937 *Hamilton Fish*. By ALLAN NEVINS
 1938 *Pedlar's Progress*. By ODELL SHEPARD
 Andrew Jackson (2 vols). By MARQUIS JAMES
 1939 *Benjamin Franklin*. By CARL VAN DOREN
 1940 *Woodrow Wilson. Life and Letters*, Vol. VII and VIII. By RAY STANNARD BAKER

- 1941 *Jonathan Edwards*. By OLA ELIZABETH WINSLOW
 1942 *Crusader in Crinoline*. By FORREST WILSON
 1943 *Admiral of the Ocean Sea*. By SAMUEL ELIOT MORISON
 1944 *The American Leonardo: The Life of Samuel F. B. Morse*. By CARLTON MABEE
 1945 *George Bancroft: Brahmin Rebel*. By RUSSEL BLAINE NYE
 1946 *Son of the Wilderness*. By LINNIE MARSH WOLFE
 1947 *The Autobiography of William Allen White*
 1948 *Forgotten First Citizen: John Bigelow*. By MARGARET CLAPP
 1949 *Roosevelt and Hopkins*. By ROBERT E. SHERWOOD
 1950 *John Quincy Adams and the Foundations of American Foreign Policy*. By SAMUEL FLAGG BEMIS

Poetry

- 1918* *Love Songs*. By SARA TEASDALE
 1919* *Old Road to Paradise*. By MARGARET WIDDEMER
 Corn Huskers. By CARL SANDBURG
 1922 *Collected Poems*. By EDWIN ARLINGTON ROBINSON
 1923 *The Ballad of the Harp-Weaver; A Few Figs from Thistles; Eight Sonnets in American Poetry, 1922, A Miscellany*. By EDNA ST. VINCENT MILLAY
 1924 *New Hampshire: A Poem with Notes and Grace Notes*. By ROBERT FROST
 1925 *The Man Who Died Twice*. By EDWIN ARLINGTON ROBINSON
 1926 *What's O'Clock*. By AMY LOWELL
 1927 *Fiddler's Farewell*. By LEONORA SPEYER
 1928 *Tristram*. By EDWIN ARLINGTON ROBINSON
 1929 *John Brown's Body*. By STEPHEN VINCENT BENÉT
 1930 *Selected Poems*. By CONRAD AIKEN
 1931 *Collected Poems*. By ROBERT FROST

Music

- 1943 *Secular Cantata No. 2, A Free Song*. By WILLIAM SCHUMAN
 1944 *Symphony No. 4 (Op. 34)*. By HOWARD HANSON
 1945 *Appalachian Spring*. By AARON COPLAND
 1946 *The Canticle of the Sun*. By LEO SOWERBY
 1947 *Symphony No. 3*. By CHARLES IVES
 1948 *Symphony No. 3*. By WALTER PISTON
 1949 *Louisiana Story* music. By VIRGIL THOMSON
 1950 *The Consul*. By GIAN-CARLO MENOTTI

Special Award

- 1944 *Oklahoma!* By RICHARD RODGERS and OSCAR HAMMERSTEIN, 2ND

* Previous to the establishment of this prize in 1922, the 1918 and 1919 awards were made from gifts provided by the Poetry Society.

List of Academy Awards for Production, Acting, and Direction

Year	Production	Director and Movie
1928	<i>Wings</i> , Paramount	Frank Borzage, <i>Seventh Heaven</i>
1929	<i>Broadway Melody</i> , M-G-M	Lewis Milestone, <i>Two Arabian Nights</i>
1930	<i>All Quiet on the Western Front</i> , Universal	Frank Lloyd, <i>The Divine Lady</i>
1931	<i>Cimarron</i> , RKO	Lewis Milestone, <i>All Quiet on the Western Front</i>
1932	<i>Grand Hotel</i> , M-G-M	Norman Taurog, <i>Skippy</i>
1933	<i>Cavalcade</i> , Fox	Frank Borzage, <i>Bad Girl</i>
1934	<i>It Happened One Night</i> , Columbia	Frank Lloyd, <i>Cavalcade</i>
1935	<i>Mutiny on the Bounty</i> , M-G-M	Frank Capra, <i>It Happened One Night</i>
		John Ford, <i>The Informer</i>

} joint awards

Academy Awards—(cont.)

Production

- 1936 *The Great Ziegfeld*, M-G-M
 1937 *The Life of Emile Zola*, Warner
 1938 *You Can't Take It With You*, Columbia
 1939 *Gone With the Wind*, Selznick
 1940 *Rebecca*, Selznick
 1941 *How Green Was My Valley*, 20th Century-Fox
 1942 *Mrs. Miniver*, M-G-M
 1943 *Casablanca*, Warner
 1944 *Going My Way*, Paramount
 1945 *The Lost Weekend*, Paramount
 1946 *Best Years of Our Lives*, M-G-M
 1947 *Gentleman's Agreement*, 20th Century-Fox
 1948 *Hamlet*, J. Arthur Rank
 1949 *All the King's Men*, Columbia

Actress and Movie

- 1928 Janet Gaynor, *Seventh Heaven*
 1929 Mary Pickford, *Coquette*
 1930 Norma Shearer, *Divorcee*
 1931 Marie Dressler, *Min and Bill*
 1932 Helen Hayes, *Sin of Madelon Claudet*
 1933 Katharine Hepburn, *Morning Glory*
 1934 Claudette Colbert, *It Happened One Night*
 1935 Bette Davis, *Dangerous*
 1936 Luise Rainer, *The Great Ziegfeld*
 1937 Luise Rainer, *The Good Earth*
 1938 Bette Davis, *Jezebel*
 1939 Vivien Leigh, *Gone With the Wind*
 1940 Ginger Rogers, *Kitty Foyle*
 1941 Joan Fontaine, *Suspicion*
 1942 Greer Garson, *Mrs. Miniver*
 1943 Jennifer Jones, *Song of Bernadette*
 1944 Ingrid Bergman, *Gaslight*
 1945 Joan Crawford, *Mildred Pierce*
 1946 Olivia de Havilland, *To Each His Own*
 1947 Loretta Young, *The Farmer's Daughter*
 1948 Jane Wyman, *Johnny Belinda*
 1949 Olivia de Havilland, *The Heiress*

Actress (supporting role)

- 1936 Gale Sondergaard, *Anthony Adverse*
 1937 Alice Brady, *In Old Chicago*
 1938 Fay Bainter, *Jezebel*
 1939 Hattie McDaniel, *Gone With the Wind*
 1940 Jane Darwell, *The Grapes of Wrath*
 1941 Mary Astor, *The Great Lie*
 1942 Teresa Wright, *Mrs. Miniver*
 1943 Katina Paxinou, *For Whom the Bell Tolls*
 1944 Ethel Barrymore, *None But the Lonely Heart*
 1945 Anne Revere, *National Velvet*
 1946 Anne Baxter, *The Razor's Edge*
 1947 Celeste Holm, *Gentleman's Agreement*
 1948 Claire Trevor, *Key Largo*
 1949 Mercedes McCambridge, *All the King's Men*

Director and Movie

- Frank Capra, *Mr. Deeds Goes to Town*
 Leo McCarey, *The Awful Truth*
 Frank Capra, *You Can't Take It With You*
 Victor Fleming, *Gone With the Wind*
 John Ford, *The Grapes of Wrath*
 John Ford, *How Green Was My Valley*
 William Wyler, *Mrs. Miniver*
 Michael Curtiz, *Casablanca*
 Leo McCarey, *Going My Way*
 Billy Wilder, *The Lost Weekend*
 William Wyler, *Best Years of Our Lives*
 Elia Kazan, *Gentleman's Agreement*
 John Huston, *The Treasure of Sierra Madre*
 Joseph L. Mankiewicz, *A Letter to Three Wives*

Actor and Movie

- Emil Jannings, *Way of All Flesh*
 Warner Baxter, *In Old Arizona*
 George Arliss, *Disraeli*
 Lionel Barrymore, *Free Soul*
 Fredric March, *Dr. Jekyll and Mr. Hyde*
 Charles Laughton, *Priv. Life of Henry VIII*
 Clark Gable, *It Happened One Night*
 Victor McLaglen, *The Informer*
 Paul Muni, *The Story of Louis Pasteur*
 Spencer Tracy, *Captains Courageous*
 Spencer Tracy, *Boys Town*
 Robert Donat, *Goodbye, Mr. Chips*
 James Stewart, *Philadelphia Story*
 Gary Cooper, *Sergeant York*
 James Cagney, *Yankee Doodle Dandy*
 Paul Lukas, *Watch on the Rhine*
 Bing Crosby, *Going My Way*
 Ray Milland, *The Lost Weekend*
 Fredric March, *Best Years of Our Lives*
 Ronald Colman, *A Double Life*
 Sir Laurence Olivier, *Hamlet*
 Broderick Crawford, *All the King's Men*

Actor (supporting role)

- Walter Brennan, *Come and Get It*
 Joseph Schildkraut, *Life of Emile Zola*
 Walter Brennan, *Kentucky*
 Thomas Mitchell, *Stage Coach*
 Walter Brennan, *The Westerner*
 Donald Crisp, *How Green Was My Valley*
 Van Heflin, *Johnny Eager*
 Charles Coburn, *More the Merrier*
 Barry Fitzgerald, *Going My Way*
 James Dunn, *A Tree Grows in Brooklyn*
 Harold Russell, *Best Years of Our Lives*
 Edmund Gwenn, *Miracle on 34th Street*
 Walter Huston, *The Treasure of Sierra Madre*
 Dean Jagger, *Twelve O'Clock High*

Other Academy Awards for 1949

Original story: *The Stratton Story*, Douglas Morrow.

Screen play: *A Letter to Three Wives*, Joseph L. Mankiewicz.

Story and screen play: *Battleground*, Robert Pirosh.

Documentary short subject: *A Chance to Live*, Richard de Rochemont; *So Much for So Little*, Edward Selzer.

Documentary feature: *Daybreak in Udi*, Crown Film Unit.

Foreign film: *The Bicycle Thief*, Mayer-Burstein.

Cartoon: *For Scent-imental Reasons*, Edward Selzer.

One-reel film: *Aquatic House Party*, Jack Eaton.

Two-reel film: *Van Gogh*, Gaston Diehl and Robert Haessens.

Sound recording: *Twelve O'Clock High*, 20th Century-Fox.

Film editing: *Champion*, Harry Gerstad.

Special effects: *Mighty Joe Young*, RKO-ARCO.

Black and white cinematography: *Battleground*, Paul C. Vogel.

Color cinematography: *She Wore a Yellow Ribbon*, Winton Hoch.

Black and white art direction: *The Heiress*, John Meehan and Harry Horner.

Color art direction: *Little Women*, Cedric Gibbons, Paul Groesse.

Black and white costume design: *The Heiress*, Edith Head and Gile Steele.

Color costume design: *Adventures of Don Juan*, Leah Rhodes, Travilla, and Marjorie Best.

Best scoring for musical: *On the Town*, Roger Edens and Lennie Hayton.

Best musical scoring for drama or comedy: *The Heiress*, Aaron Copland.

Best original song: "Baby, It's Cold Outside" from *Neptune's Daughter*, Frank Loesser.

Special award: Jean Hersholt, for distinguished service to movie industry.

Special award: Bobby Driscoll, for best child performances (*The Window* and *So Dear to My Heart*).

Special award: Fred Astaire, for contribution to musical pictures.

Special award: Cecil B. DeMille, for his 37 years in movie industry.

New York Film Critics' Awards

(1—best motion picture; 2—best male performance; 3—best feminine performance; 4—best direction; 5—best foreign film; 6—special award.)

- | | | |
|------|---|--|
| 1940 | 1. <i>The Grapes of Wrath</i> , 20th Cent.-Fox | 4. Billy Wilder, <i>The Lost Weekend</i> |
| | 2. Charles Chaplin,* <i>The Great Dictator</i> | 5. (None) |
| | 3. Katharine Hepburn, <i>The Philadelphia Story</i> | 6. <i>The True Glory</i> and <i>The Fighting Lady</i> |
| | 4. John Ford, <i>The Grapes of Wrath</i> | 1946 |
| | 5. <i>The Baker's Wife</i> (French) | 1. <i>The Best Years of Our Lives</i> , RKO-Samuel Goldwyn |
| 1941 | 1. <i>Citizen Kane</i> , RKO-Mercury | 2. Laurence Olivier, <i>Henry V</i> |
| | 2. Gary Cooper, <i>Sergeant York</i> | 3. Celia Johnson, <i>Brief Encounter</i> |
| | 3. Joan Fontaine, <i>Suspicion</i> | 4. William Wyler, <i>The Best Years of Our Lives</i> |
| | 4. John Ford, <i>How Green Was My Valley</i> | 5. <i>Open City</i> (Italian) |
| 1942 | 1. <i>In Which We Serve</i> , UA-Noel Coward | 1947 |
| | 2. James Cagney, <i>Yankee Doodle Dandy</i> | 1. <i>Gentleman's Agreement</i> , 20th Cent.-Fox |
| | 3. Agnes Moorehead, <i>The Magnificent Ambersons</i> | 2. William Powell, <i>Life With Father</i> |
| | 4. John Farrow, <i>Wake Island</i> | 3. Deborah Kerr, <i>The Adventuress</i> and <i>Black Narcissus</i> |
| 1943 | 1. <i>Watch on the Rhine</i> , Warners | 4. Ella Kazan, <i>Gentleman's Agreement</i> and <i>Boomerang</i> |
| | 2. Paul Lukas, <i>Watch on the Rhine</i> | 5. <i>To Live in Peace</i> (Italian) |
| | 3. Ida Lupino, <i>The Hard Way</i> | 1948 |
| | 4. George Stevens, <i>The More the Merrier</i> | 1. <i>The Treasure of Sierra Madre</i> , Warners |
| 1944 | 1. <i>Going My Way</i> , Paramount | 2. Sir Laurence Olivier, <i>Hamlet</i> |
| | 2. Barry Fitzgerald, <i>Going My Way</i> | 3. Olivia de Havilland, <i>The Snake Pit</i> |
| | 3. Tallulah Bankhead, <i>Libeboat</i> | 4. John Huston, <i>The Treasure of Sierra Madre</i> |
| | 4. Leo McCarey, <i>Going My Way</i> | 5. <i>Paisan</i> (Italian) |
| 1945 | 1. <i>The Lost Weekend</i> , Paramount | 1949 |
| | 2. Ray Milland, <i>The Lost Weekend</i> | 1. <i>All the King's Men</i> , Columbia |
| | 3. Ingrid Bergman, <i>Spellbound</i> and <i>The Bells of St. Mary's</i> | 2. Broderick Crawford, <i>All the King's Men</i> |
| | | 3. Olivia de Havilland, <i>The Heiress</i> |
| | | 4. Carol Reed, <i>The Fallen Idol</i> |
| | | 5. <i>The Bicycle Thief</i> (Italian) |

* Refused award.

New York Drama Critics' Circle Awards

- | | |
|--|--|
| 1935-36 <i>Winterset</i> , by Maxwell Anderson | 1944-45 <i>The Glass Menagerie</i> , by Tennessee Williams |
| 1936-37 <i>High Tor</i> , by Maxwell Anderson | 1945-46 (No award) |
| 1937-38 <i>Of Mice and Men</i> , by John Steinbeck | <i>Carousel</i> , by Rodgers and Hammerstein ² |
| <i>Shadow and Substance</i> , by Paul Vincent Carroll ¹ | 1946-47 <i>All My Sons</i> , by Arthur Miller |
| 1938-39 (No award) | <i>No Exit</i> , by Jean-Paul Sartre ¹ |
| <i>The White Steed</i> , by Paul Vincent Carroll ¹ | <i>Brigadoon</i> , by Lerner and Loewe ² |
| 1939-40 <i>The Time of Your Life</i> , by William Saroyan | 1947-48 <i>A Streetcar Named Desire</i> , by Tennessee Williams |
| 1940-41 <i>Watch on the Rhine</i> , by Lillian Hellman | <i>The Winslow Boy</i> , by Terence Rattigan ¹ |
| <i>The Corn Is Green</i> , by Emlyn Williams ¹ | 1948-49 <i>Death of a Salesman</i> , by Arthur Miller |
| 1941-42 (No award) | <i>The Madwoman of Chaillot</i> , by Jean Giraudoux-Maurice Valency ¹ |
| <i>Blithe Spirit</i> , by Noel Coward ¹ | <i>South Pacific</i> , by Rodgers, Hammerstein, and Joshua Logan ² |
| 1942-43 <i>The Patriots</i> , by Sidney Kingsley | 1949-50 <i>The Member of the Wedding</i> , by Carson McCullers |
| 1943-44 (No award) | <i>The Cocktail Party</i> , by T. S. Eliot ¹ |
| <i>Jacobowsky and the Colonel</i> , by Franz Werfel-S. N. Behrman ¹ | <i>The Consul</i> , by Gian-Carlo Menotti ² |

¹ Citation for best foreign play. ² Citation for best musical.

Awards by Music Critics' Circle of New York

- | | |
|---|--|
| 1941-42 <i>Symphony No. 3</i> , by William Schuman | 1946-47 <i>Symphony No. 3</i> , by Aaron Copland |
| 1942-43 <i>Symphony No. 1</i> , by Paul Creston | <i>Quartet No. 2</i> , by Ernest Bloch ¹ |
| 1943-44 <i>Jeremiah Symphony</i> , by Leonard Bernstein | 1947-48 <i>Symphony No. 3</i> , by Wallingford Riegger |
| 1944-45 <i>Symphony No. 2</i> , by Walter Piston | 1948-49 <i>Variation, Chaconne and Finale</i> , by Norman Dello Joio |
| 1945-46 <i>Concerto for Cello and Orchestra</i> , by Samuel Barber. | 1949-50 <i>Symphony No. 2</i> , by Roger Sessions |
| | <i>String Quartet (1949)</i> , by Leon Kirchner ¹ |

¹ Award for chamber music.

Poets Laureate of England

William D'Avenant	1638-1668	Thomas Warton	1785-1790
John Dryden	1670-1689	Henry James Pye	1790-1813
Thomas Shadwell	1689-1692	Robert Southey	1813-1843
Nahum Tate	1692-1715	William Wordsworth	1843-1850
Nicholas Rowe	1715-1718	Alfred Tennyson	1850-1892
Laurence Eusden	1718-1730	Alfred Austin	1896-1913
Colley Cibber	1730-1757	Robert Bridges	1913-1930
William Whitehead	1757-1785	John Masefield	1930-

NOTE: Originally, the title *poet laureate* was frequently given to eminent poets, sometimes by universities. More recently, the title has been applied to a poet appointed as an officer of the royal household to write court odes, etc., although nowadays there are no specific duties, the appointment being largely honorary. The poet laureate receives an annual stipend.

Although Ben Jonson is often considered the first poet laureate of England (1619-1637), the title was unofficial, and there had been other unofficial poets laureate before him. The title was first officially given to D'Avenant (or Davenant) on Dec. 13, 1638.

The laureateship was declined by Thomas Gray in 1757, William Mason in 1785, and Sir Walter Scott in 1813.

SPORTS

Edited by

PETER BRANDWEIN



BASEBALL

THE POPULAR TRADITION that baseball was invented by Abner Doubleday at Cooperstown, N. Y., in 1839, has been enshrined in the Hall of Fame and National Museum of Baseball erected in that town, but research has proved that a game called "Base Ball" was played in this country and England before 1839. However, the first team baseball as we know it was played at the Elysian Fields, Hoboken, N. J., on June 19, 1846, between the Knickerbockers and the New York Nine. There was a gradual growth of baseball and an improvement of equipment and playing skill in the next fifty years. Soldiers returning home from the Civil War spread over the country the game they had learned to play in their camps.

Historians have it that the first pitcher to throw a curve was William A. (Candy) Cummings in 1867. The Cincinnati Red Stockings were the first all-professional

team and in 1869 they played 64 games without a loss. The standard ball of the same size and weight, still the rule, was adopted in 1872. The first catcher's mask was worn in 1875. The National League was organized in 1876. The first chest protector was donned in 1885. The three-strike rule was put on the books in 1887 and the four-ball ticket to first base came in 1889. The pitching distance, formerly shorter, was lengthened to 60 feet 6 inches in 1893 and the rules have been only slightly modified since that time.

The American League, under the vigorous leadership of B. B. Johnson, blossomed forth as a major league in 1901. Judge Kenesaw Mountain Landis, by action of the two major leagues, became Commissioner of Baseball in 1921 and, upon his death (1944), Albert B. Chandler, former United States Senator from Kentucky, was elected to that office (1945).

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Baseball Statistics

Source: The Elias Baseball Bureau, New York City.

Record of World Series Games

(No series in 1904.)

Figures in parentheses indicate number of victories for each club. Pitchers named are winner and loser, respectively.

1903—BOSTON A. L. (5) vs. PITTSBURGH N. L. (3)

(Not under Brush rules)

Managers—J. J. Collins, Boston; F. C. Clarke, Pittsburgh.

Oct. 1—Pittsburgh (Phillippe).....	7	Boston (Young).....	3	At Boston
Oct. 2—Boston (Dinneen).....	3	Pittsburgh (Leever).....	0	At Boston
Oct. 3—Pittsburgh (Phillippe).....	4	Boston (Hughes).....	2	At Boston
Oct. 6—Pittsburgh (Phillippe).....	5	Boston (Dinneen).....	4	At Pittsburgh
Oct. 7—Boston (Young).....	11	Pittsburgh (Kennedy).....	2	At Pittsburgh
Oct. 8—Boston (Dinneen).....	6	Pittsburgh (Leever).....	3	At Pittsburgh
Oct. 10—Boston (Young).....	7	Pittsburgh (Phillippe).....	3	At Pittsburgh
Oct. 13—Boston (Dinneen).....	3	Pittsburgh (Phillippe).....	0	At Boston

1905—NEW YORK N. L. (4) vs. PHILADELPHIA A. L. (1)

Managers—John J. McGraw, New York; Connie Mack, Philadelphia.

Oct. 9—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia
Oct. 10—Philadelphia (Bender).....	3	New York (McGinnity).....	0	At New York
Oct. 12—New York (Mathewson).....	9	Philadelphia (Coakley).....	0	At Philadelphia
Oct. 13—New York (McGinnity).....	1	Philadelphia (Plank).....	0	At New York
Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	0	At New York

1906—CHICAGO A. L. (4) vs. CHICAGO N. L. (2)

Managers—Fielder Jones, Chicago A. L.; Frank L. Chance, Chicago N. L.

Oct. 9—Chicago A (Altrock).....	2	Chicago N (Brown).....	1	At Chicago Nat. Pk.
Oct. 10—Chicago N (Reulbach).....	7	Chicago A (White).....	1	At Chicago Am. Pk.
Oct. 11—Chicago A (Walsh).....	3	Chicago N (Pfiester).....	0	At Chicago Nat. Pk.
Oct. 12—Chicago N (Brown).....	1	Chicago A (Altrock).....	0	At Chicago Am. Pk.
Oct. 13—Chicago A (Walsh).....	8	Chicago N (Pfiester).....	6	At Chicago Nat. Pk.
Oct. 14—Chicago A (White).....	8	Chicago N (Brown).....	3	At Chicago Am. Pk.

1907—CHICAGO N. L. (4) vs. DETROIT A. L. (0)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 8—Chicago (tie).....	3	Detroit (tie).....	3	At Chicago (12 inn.)
Oct. 9—Chicago (Pfiester).....	3	Detroit (Mullin).....	1	At Chicago
Oct. 10—Chicago (Reulbach).....	5	Detroit (Siever).....	1	At Chicago
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Detroit
Oct. 12—Chicago (Brown).....	2	Detroit (Mullin).....	0	At Detroit

1908—CHICAGO N. L. (4) vs. DETROIT A. L. (1)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 10—Chicago (Brown).....	10	Detroit (Summers).....	6	At Detroit
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Chicago
Oct. 12—Detroit (Mullin).....	8	Chicago (Pfiester).....	3	At Chicago
Oct. 13—Chicago (Brown).....	3	Detroit (Summers).....	0	At Detroit
Oct. 14—Chicago (Overall).....	2	Detroit (Donovan).....	0	At Detroit

1909—PITTSBURGH N. L. (4) vs. DETROIT A. L. (3)

Managers—Fred C. Clarke, Pittsburgh; Hugh Jennings, Detroit.

Oct. 8—Pittsburgh (Adams).....	4	Detroit (Mullin).....	1	At Pittsburgh
Oct. 9—Detroit (Donovan).....	7	Pittsburgh (Camnitz).....	2	At Pittsburgh
Oct. 11—Pittsburgh (Maddox).....	8	Detroit (Summers).....	6	At Detroit
Oct. 12—Detroit (Mullin).....	5	Pittsburgh (Leifield).....	0	At Detroit
Oct. 13—Pittsburgh (Adams).....	8	Detroit (Summers).....	4	At Pittsburgh
Oct. 14—Detroit (Mullin).....	5	Pittsburgh (Willis).....	4	At Detroit
Oct. 16—Pittsburgh (Adams).....	8	Detroit (Donovan).....	0	At Detroit

1910—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Frank L. Chance, Chicago.

Oct. 17—Philadelphia (Bender).....	4	Chicago (Overall).....	1	At Philadelphia
Oct. 18—Philadelphia (Coombs).....	9	Chicago (Brown).....	3	At Philadelphia
Oct. 20—Philadelphia (Coombs).....	12	Chicago (McIntire).....	5	At Chicago
Oct. 22—Chicago (Brown).....	4	Philadelphia (Bender).....	3	At Chicago (10 inn.)
Oct. 23—Philadelphia (Coombs).....	7	Chicago (Brown).....	2	At Chicago

1911—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (2)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	1	At New York
Oct. 16—Philadelphia (Plank).....	3	New York (Marquard).....	1	At Philadelphia
Oct. 17—Philadelphia (Coombs).....	3	New York (Mathewson).....	2	At New York (11 inn.)
Oct. 24—Philadelphia (Bender).....	4	New York (Mathewson).....	2	At Philadelphia
Oct. 25—New York (Crandall).....	4	Philadelphia (Plank).....	3	At New York (10 inn.)
Oct. 26—Philadelphia (Bender).....	13	New York (Ames).....	2	At Philadelphia

1912—BOSTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—J. Garland Stahl, Boston; John J. McGraw, New York.

Oct. 8—Boston (Wood).....	4	New York (Tesreau).....	3	At New York
Oct. 9—Boston (tie).....	6	New York (tie).....	6	At Boston (11 inn.)
Oct. 10—New York (Marquard).....	2	Boston (O'Brien).....	1	At Boston
Oct. 11—Boston (Wood).....	3	New York (Tesreau).....	1	At New York
Oct. 12—Boston (Bedient).....	2	New York (Mathewson).....	1	At Boston
Oct. 14—New York (Marquard).....	5	Boston (O'Brien).....	2	At New York
Oct. 15—New York (Tesreau).....	11	Boston (Wood).....	4	At Boston
Oct. 16—Boston (Wood).....	3	New York (Mathewson).....	2	At Boston (10 inn.)

1913—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (1)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

Oct. 7—Philadelphia (Bender).....	6	New York (Marquard).....	4	At New York
Oct. 8—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia (10 inn.)
Oct. 9—Philadelphia (Bush).....	8	New York (Tesreau).....	2	At New York
Oct. 10—Philadelphia (Bender).....	6	New York (Demaree).....	5	At Philadelphia
Oct. 11—Philadelphia (Plank).....	3	New York (Mathewson).....	1	At New York

1914—BOSTON N. L. (4) vs. PHILADELPHIA A. L. (0)

Managers—George T. Stallings, Boston; Connie Mack, Philadelphia.

Oct. 9—Boston (Rudolph).....	7	Philadelphia (Bender).....	1	At Philadelphia
Oct. 10—Boston (James).....	1	Philadelphia (Plank).....	0	At Philadelphia
Oct. 12—Boston (James).....	5	Philadelphia (Bush).....	4	At Boston (12 inn.)
Oct. 13—Boston (Rudolph).....	3	Philadelphia (Shawkey).....	1	At Boston

1915—BOSTON A. L. (4) vs. PHILADELPHIA N. L. (1)

Managers—William Carrigan, Boston; Patrick J. Moran, Philadelphia.

Oct. 8—Philadelphia (Alexander).....	3	Boston (Shore).....	1	At Philadelphia
Oct. 9—Boston (Foster).....	2	Philadelphia (Mayer).....	1	At Philadelphia
Oct. 11—Boston (Leonard).....	2	Philadelphia (Alexander).....	1	At Boston
Oct. 12—Boston (Shore).....	2	Philadelphia (Chalmers).....	1	At Boston
Oct. 13—Boston (Foster).....	5	Philadelphia (Rixey).....	4	At Philadelphia

1916—BOSTON A. L. (4) vs. BROOKLYN N. L. (1)

Managers—William Carrigan, Boston; Wilbert J. Robinson, Brooklyn.

Oct. 7—Boston (Shore).....	6	Brooklyn (Marquard).....	5	At Boston
Oct. 9—Boston (Ruth).....	2	Brooklyn (Smith).....	1	At Boston (14 inn.)
Oct. 10—Brooklyn (Coombs).....	4	Boston (Mays).....	3	At Brooklyn
Oct. 11—Boston (Leonard).....	6	Brooklyn (Marquard).....	2	At Brooklyn
Oct. 12—Boston (Shore).....	4	Brooklyn (Pfeffer).....	1	At Boston

1917—CHICAGO A. L. (4) NEW YORK N. L. (2)

Managers—Clarence H. Rowland, Chicago; John J. McGraw, New York.

Oct. 6—Chicago (Cicotte).....	2	New York (Sallee).....	1	At Chicago
Oct. 7—Chicago (Faber).....	7	New York (Anderson).....	2	At Chicago
Oct. 10—New York (Benton).....	2	Chicago (Cicotte).....	0	At New York
Oct. 11—New York (Schupp).....	5	Chicago (Faber).....	0	At New York
Oct. 13—Chicago (Faber).....	8	New York (Sallee).....	5	At Chicago
Oct. 15—Chicago (Faber).....	4	New York (Benton).....	2	At New York

1918—BOSTON A. L. (4) vs. CHICAGO N. L. (2)

Managers—E. G. Barrow, Boston; Fred L. Mitchell, Chicago.

Sept. 5—Boston (Ruth).....	1	Chicago (Vaughn).....	0	At Chicago
Sept. 6—Chicago (Tyler).....	3	Boston (Bush).....	1	At Chicago
Sept. 7—Boston (Mays).....	2	Chicago (Vaughn).....	1	At Chicago
Sept. 9—Boston (Ruth).....	3	Chicago (Douglas).....	2	At Boston
Sept. 10—Chicago (Vaughn).....	3	Boston (Jones).....	0	At Boston
Sept. 11—Boston (Mays).....	2	Chicago (Tyler).....	1	At Boston

1919—CINCINNATI N. L. (5) vs. CHICAGO A. L. (3)

Managers—Patrick J. Moran, Cincinnati; William Gleason, Chicago.

Oct. 1—Cincinnati (Ruether).....	9	Chicago (Cicotte).....	1	At Cincinnati
Oct. 2—Cincinnati (Sallee).....	4	Chicago (Williams).....	2	At Cincinnati
Oct. 3—Chicago (Kerr).....	3	Cincinnati (Fisher).....	0	At Chicago
Oct. 4—Cincinnati (Ring).....	2	Chicago (Cicotte).....	0	At Chicago
Oct. 6—Cincinnati (Eller).....	5	Chicago (Williams).....	0	At Chicago
Oct. 7—Chicago (Kerr).....	5	Cincinnati (Ring).....	4	At Cincinnati
Oct. 8—Chicago (Cicotte).....	4	Cincinnati (Sallee).....	1	At Cincinnati
Oct. 9—Cincinnati (Eller).....	10	Chicago (Williams).....	5	At Chicago (10 inn.)

1920—CLEVELAND A. L. (5) vs. BROOKLYN N. L. (2)

Managers—Tris Speaker, Cleveland; Wilbert J. Robinson, Brooklyn.

Oct. 5—Cleveland (Coveleskie).....	3	Brooklyn (Marquard).....	1	At Brooklyn
Oct. 6—Brooklyn (Grimes).....	3	Cleveland (Bagby).....	0	At Brooklyn
Oct. 7—Brooklyn (Smith).....	2	Cleveland (Caldwell).....	1	At Brooklyn
Oct. 9—Cleveland (Coveleskie).....	5	Brooklyn (Cadore).....	1	At Cleveland
Oct. 10—Cleveland (Bagby).....	8	Brooklyn (Grimes).....	1	At Cleveland
Oct. 11—Cleveland (Mails).....	1	Brooklyn (Smith).....	0	At Cleveland
Oct. 12—Cleveland (Coveleskie).....	3	Brooklyn (Grimes).....	0	At Cleveland

1921—NEW YORK N. L. (5) vs. NEW YORK A. L. (3)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 5—New York A (Mays).....	3	New York N (Nehf).....	0	At Polo Grounds
Oct. 6—New York A (Hoyt).....	3	New York N (Douglas).....	0	At Polo Grounds
Oct. 7—New York N (Barnes).....	13	New York A (Quinn).....	5	At Polo Grounds
Oct. 9—New York N (Douglas).....	4	New York A (Mays).....	2	At Polo Grounds
Oct. 10—New York A (Hoyt).....	3	New York N (Nehf).....	1	At Polo Grounds
Oct. 11—New York N (Barnes).....	8	New York A (Shawkey).....	5	At Polo Grounds
Oct. 12—New York N (Douglas).....	2	New York A (Mays).....	1	At Polo Grounds
Oct. 13—New York N (Nehf).....	1	New York A (Hoyt).....	0	At Polo Grounds

1922—NEW YORK N. L. (4) vs. NEW YORK A. L. (0)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 4—New York N (Ryan).....	3	New York A (Bush).....	2	At Polo Grounds
Oct. 5—New York N (tie).....	3	New York A (tie).....	0	At Polo Grounds (10 inn.)
Oct. 6—New York N (Scott).....	3	New York A (Hoyt).....	3	At Polo Grounds
Oct. 7—New York N (McQuillan).....	4	New York A (Mays).....	3	At Polo Grounds
Oct. 8—New York N (Nehf).....	5	New York A (Bush).....	3	At Polo Grounds

1923—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Miller J. Huggins, New York A. L.; John J. McGraw, New York N. L.

Oct. 10—New York N (Ryan).....	5	New York A (Bush).....	4	At Yankee Stadium
Oct. 11—New York A (Pennock).....	4	New York N (McQuillan).....	2	At Polo Grounds
Oct. 12—New York N (Nehf).....	1	New York A (Jones).....	0	At Yankee Stadium
Oct. 13—New York A (Shawkey).....	8	New York N (Scott).....	4	At Polo Grounds
Oct. 14—New York A (Bush).....	8	New York N (Bentley).....	1	At Yankee Stadium
Oct. 15—New York A (Pennock).....	6	New York N (Nehf).....	4	At Polo Grounds

1924—WASHINGTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—Stanley R. Harris, Washington; John J. McGraw, New York.

Oct. 4—New York (Nehf).....	4	Washington (Johnson).....	3	At Washington (12 inn.)
Oct. 5—Washington (Zachary).....	4	New York (Bentley).....	3	At Washington
Oct. 6—New York (McQuillan).....	6	Washington (Marberry).....	4	At New York
Oct. 7—Washington (Mogridge).....	7	New York (Barnes).....	4	At New York
Oct. 8—New York (Bentley).....	6	Washington (Johnson).....	2	At New York
Oct. 9—Washington (Zachary).....	2	New York (Nehf).....	1	At Washington
Oct. 10—Washington (Johnson).....	4	New York (Bentley).....	3	At Washington (12 inn.)

1925—PITTSBURGH N. L. (4) vs. WASHINGTON A. L. (3)

Managers—William B. McKechnie, Pittsburgh; Stanley R. Harris, Washington.

Oct. 7—Washington (Johnson).....	4	Pittsburgh (Meadows).....	1	At Pittsburgh
Oct. 8—Pittsburgh (Aldridge).....	3	Washington (Coveleskie).....	2	At Pittsburgh
Oct. 10—Washington (Ferguson).....	4	Pittsburgh (Kremer).....	3	At Washington
Oct. 11—Washington (Johnson).....	4	Pittsburgh (Yde).....	0	At Washington
Oct. 12—Pittsburgh (Aldridge).....	6	Washington (Coveleskie).....	3	At Washington
Oct. 13—Pittsburgh (Kremer).....	3	Washington (Ferguson).....	2	At Pittsburgh
Oct. 15—Pittsburgh (Kremer).....	9	Washington (Johnson).....	7	At Pittsburgh

1926—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (3)

Managers—Rogers Hornsby, St. Louis; Miller J. Huggins, New York.

Oct. 2—New York (Pennock).....	2	St. Louis (Sherdel).....	1	At New York
Oct. 3—St. Louis (Alexander).....	6	New York (Shocker).....	2	At New York
Oct. 5—St. Louis (Haines).....	4	New York (Ruether).....	0	At St. Louis
Oct. 6—New York (Hoyt).....	10	St. Louis (Reinhart).....	5	At St. Louis
Oct. 7—New York (Pennock).....	3	St. Louis (Sherdel).....	2	At St. Louis (10 inn.)
Oct. 9—St. Louis (Alexander).....	10	New York (Shawkey).....	2	At New York
Oct. 10—St. Louis (Haines).....	3	New York (Hoyt).....	2	At New York

1927—NEW YORK A. L. (4) vs. PITTSBURGH N. L. (0)

Managers—Miller J. Huggins, New York; Owen J. Bush, Pittsburgh.

Oct. 5—New York (Hoyt).....	5	Pittsburgh (Kremer).....	4	At Pittsburgh
Oct. 6—New York (Pipgras).....	6	Pittsburgh (Aldridge).....	2	At Pittsburgh
Oct. 7—New York (Pennock).....	8	Pittsburgh (Meadows).....	1	At New York
Oct. 8—New York (Moore).....	4	Pittsburgh (Miljus).....	3	At New York

1928—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (0)

Managers—Miller J. Huggins, New York; William B. McKechnie, St. Louis.

Oct. 4—New York (Hoyt).....	4	St. Louis (Sherdel).....	1	At New York
Oct. 5—New York (Pipgras).....	9	St. Louis (Alexander).....	3	At New York
Oct. 7—New York (Zachary).....	7	St. Louis (Haines).....	3	At St. Louis
Oct. 9—New York (Hoyt).....	7	St. Louis (Sherdel).....	3	At St. Louis

1929—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Joseph V. McCarthy, Chicago.

Oct. 8—Philadelphia (Ehmke).....	3	Chicago (Root).....	1	At Chicago
Oct. 9—Philadelphia (Earnshaw).....	9	Chicago (Malone).....	3	At Chicago
Oct. 11—Chicago (Bush).....	3	Philadelphia (Earnshaw).....	1	At Philadelphia
Oct. 12—Philadelphia (Rommel).....	10	Chicago (Blake).....	8	At Philadelphia
Oct. 14—Philadelphia (Walberg).....	3	Chicago (Malone).....	2	At Philadelphia

1930—PHILADELPHIA A. L. (4) vs. ST. LOUIS N. L. (2)

Managers—Connie Mack, Philadelphia; Charles E. Street, St. Louis.

Oct. 1—Philadelphia (Grove).....	5	St. Louis (Grimes).....	2	At Philadelphia
Oct. 2—Philadelphia (Earnshaw).....	6	St. Louis (Rhém).....	1	At Philadelphia
Oct. 4—St. Louis (Hallahan).....	5	Philadelphia (Walberg).....	0	At St. Louis
Oct. 5—St. Louis (Haines).....	3	Philadelphia (Grove).....	1	At St. Louis
Oct. 6—Philadelphia (Grove).....	2	St. Louis (Grimes).....	0	At St. Louis
Oct. 8—Philadelphia (Earnshaw).....	8	St. Louis (Hallahan).....	1	At Philadelphia

1931—ST. LOUIS N. L. (4) vs. PHILADELPHIA A. L. (3)

Managers—Charles E. Street, St. Louis; Connie Mack, Philadelphia.

Oct. 1—Philadelphia (Grove).....	6	St. Louis (Derringer).....	2	At St. Louis
Oct. 2—St. Louis (Hallahan).....	2	Philadelphia (Earnshaw).....	0	At St. Louis
Oct. 5—St. Louis (Grimes).....	5	Philadelphia (Grove).....	2	At Philadelphia
Oct. 6—Philadelphia (Earnshaw).....	3	St. Louis (Johnson).....	0	At Philadelphia
Oct. 7—St. Louis (Hallahan).....	5	Philadelphia (Hoyt).....	1	At Philadelphia
Oct. 9—Philadelphia (Grove).....	8	St. Louis (Derringer).....	1	At St. Louis
Oct. 10—St. Louis (Grimes).....	4	Philadelphia (Earnshaw).....	2	At St. Louis

1932—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Charles J. Grimm, Chicago.

Sept. 28—New York (Ruffing).....	12	Chicago (Bush).....	6	At New York
Sept. 29—New York (Gomez).....	5	Chicago (Warneke).....	2	At New York
Oct. 1—New York (Pipgras).....	7	Chicago (Root).....	5	At Chicago
Oct. 2—New York (Moore).....	13	Chicago (May).....	6	At Chicago

1933—NEW YORK N. L. (4) vs. WASHINGTON A. L. (1)

Managers—William H. Terry, New York; Joseph E. Cronin, Washington.

Oct. 3—New York (Hubbell).....	4	Washington (Stewart).....	2	At New York
Oct. 4—New York (Schumacher).....	6	Washington (Crowder).....	1	At New York
Oct. 5—Washington (Whitehill).....	4	New York (Fitzsimmons).....	0	At Washington
Oct. 6—New York (Hubbell).....	2	Washington (Weaver).....	1	At Washington (11 inn.)
Oct. 7—New York (Luque).....	4	Washington (Russell).....	3	At Washington (10 inn.)

1934—ST. LOUIS N. L. (4) vs. DETROIT A. L. (3)

Managers—Frank F. Frisch, St. Louis; Gordon S. Cochrane, Detroit.

Oct. 3—St. Louis (J. Dean).....	8	Detroit (Crowder).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	3	St. Louis (W. Walker).....	2	At Detroit (12 inn.)
Oct. 5—St. Louis (P. Dean).....	4	Detroit (Bridges).....	1	At St. Louis
Oct. 6—Detroit (Auker).....	10	St. Louis (W. Walker).....	4	At St. Louis
Oct. 7—Detroit (Bridges).....	3	St. Louis (J. Dean).....	1	At St. Louis
Oct. 8—St. Louis (P. Dean).....	4	Detroit (Rowe).....	3	At Detroit
Oct. 9—St. Louis (J. Dean).....	11	Detroit (Auker).....	0	At Detroit

1935—DETROIT A. L. (4) vs. CHICAGO N. L. (2)

Managers—Gordon S. Cochrane, Detroit; Charles J. Grimm, Chicago.

Oct. 2—Chicago (Warneke).....	3	Detroit (Rowe).....	0	At Detroit
Oct. 3—Detroit (Bridges).....	8	Chicago (Root).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	6	Chicago (French).....	5	At Chicago (11 inn.)
Oct. 5—Detroit (Crowder).....	2	Chicago (Carleton).....	1	At Chicago
Oct. 6—Chicago (Warneke).....	3	Detroit (Rowe).....	1	At Chicago
Oct. 7—Detroit (Bridges).....	4	Chicago (French).....	3	At Detroit

1936—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Sept. 30—Giants (Hubbell).....	6	Yankees (Ruffing).....	1	At Polo Grounds
Oct. 2—Yankees (Gomez).....	18	Giants (Schumacher).....	4	At Polo Grounds
Oct. 3—Yankees (Hadley).....	2	Giants (Fitzsimmons).....	1	At Yankee Stadium
Oct. 4—Yankees (Pearson).....	5	Giants (Hubbell).....	2	At Yankee Stadium
Oct. 5—Giants (Schumacher).....	5	Yankees (Malone).....	4	At Yankee Stadium (10 inn.)
Oct. 6—Yankees (Gomez).....	13	Giants (Fitzsimmons).....	5	At Polo Grounds

1937—NEW YORK A. L. (4) vs. NEW YORK N. L. (1)

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Oct. 6—Yankees (Gomez).....	8	Giants (Hubbell).....	1	At Yankee Stadium
Oct. 7—Yankees (Ruffing).....	8	Giants (Melton).....	1	At Yankee Stadium
Oct. 8—Yankees (Pearson).....	5	Giants (Schumacher).....	1	At Polo Grounds
Oct. 9—Giants (Hubbell).....	7	Yankees (Hadley).....	3	At Polo Grounds
Oct. 10—Yankees (Gomez).....	4	Giants (Melton).....	2	At Polo Grounds

1938—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Charles L. Hartnett, Chicago.

Oct. 5—New York (Ruffing).....	3	Chicago (Lee).....	1	At Chicago
Oct. 6—New York (Gomez).....	6	Chicago (Dean).....	3	At Chicago
Oct. 8—New York (Pearson).....	5	Chicago (Bryant).....	2	At New York
Oct. 9—New York (Ruffing).....	8	Chicago (Lee).....	3	At New York

1939—NEW YORK A. L. (4) vs. CINCINNATI N. L. (0)

Managers—Joseph V. McCarthy, New York; William B. McKechnie, Cincinnati.

Oct. 4—New York (Ruffing).....	2	Cincinnati (Derringer).....	1	At New York
Oct. 5—New York (Pearson).....	4	Cincinnati (Walters).....	0	At New York
Oct. 7—New York (Hadley).....	7	Cincinnati (Thompson).....	3	At Cincinnati
Oct. 8—New York (Murphy).....	7	Cincinnati (Walters).....	4	At Cincinnati (10 inn.)

1940—CINCINNATI N. L. (4) vs. DETROIT A. L. (3)

Managers—William B. McKechnie, Cincinnati; Delmar D. Baker, Detroit.

Oct. 2—Detroit (Newsom).....	7	Cincinnati (Derringer).....	2	At Cincinnati
Oct. 3—Cincinnati (Walters).....	5	Detroit (Rowe).....	3	At Cincinnati
Oct. 4—Detroit (Bridges).....	7	Cincinnati (Turner).....	4	At Detroit
Oct. 5—Cincinnati (Derringer).....	5	Detroit (Trout).....	2	At Detroit
Oct. 6—Detroit (Newsom).....	8	Cincinnati (Thompson).....	0	At Detroit
Oct. 7—Cincinnati (Walters).....	4	Detroit (Rowe).....	0	At Cincinnati
Oct. 8—Cincinnati (Derringer).....	2	Detroit (Newsom).....	1	At Cincinnati

1941—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Joseph V. McCarthy, New York; Leo E. Durocher, Brooklyn.

Oct. 1—New York (Ruffing).....	3	Brooklyn (Davis).....	2	At New York
Oct. 2—Brooklyn (Wyatt).....	3	New York (Chandler).....	2	At New York
Oct. 4—New York (Russo).....	2	Brooklyn (Casey).....	1	At Brooklyn
Oct. 5—New York (Murphy).....	7	Brooklyn (Casey).....	4	At Brooklyn
Oct. 6—New York (Bonham).....	3	Brooklyn (Wyatt).....	1	At Brooklyn

1942—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (1)

Managers—William H. Southworth, St. Louis; Joseph V. McCarthy, New York.

Sept. 30—New York (Ruffing).....	7	St. Louis (M. Cooper).....	4	At St. Louis
Oct. 1—St. Louis (Beazley).....	4	New York (Bonham).....	3	At St. Louis
Oct. 3—St. Louis (White).....	2	New York (Chandler).....	0	At New York
Oct. 4—St. Louis (Lanier).....	9	New York (Donald).....	6	At New York
Oct. 5—St. Louis (Beazley).....	4	New York (Ruffing).....	2	At New York

1943—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (1)

Managers—Joseph V. McCarthy, New York; William H. Southworth, St. Louis.

Oct. 5—New York (Chandler).....	4	St. Louis (Lanier).....	2	At New York
Oct. 6—St. Louis (M. Cooper).....	4	New York (Bonham).....	3	At New York
Oct. 7—New York (Borowy).....	6	St. Louis (Brazle).....	2	At New York
Oct. 10—New York (Russo).....	2	St. Louis (Brecheen).....	1	At St. Louis
Oct. 11—New York (Chandler).....	2	St. Louis (M. Cooper).....	0	At St. Louis

1944—ST. LOUIS N. L. (4) vs. ST. LOUIS A. L. (2)

Managers—William H. Southworth, Cardinals; J. Luther Sewell, Browns.

Oct. 4—Browns (Galehouse).....	2	Cardinals (M. Cooper).....	1	At Sportsman's Park
Oct. 5—Cardinals (Donnelly).....	3	Browns (Muncier).....	2	At Sportsman's Pk. (11 inn.)
Oct. 6—Browns (Kramer).....	6	Cardinals (Wilks).....	2	At Sportsman's Park
Oct. 7—Cardinals (Brecheen).....	5	Browns (Jakucki).....	1	At Sportsman's Park
Oct. 8—Cardinals (M. Cooper).....	2	Browns (Galehouse).....	0	At Sportsman's Park
Oct. 9—Cardinals (Lanier).....	3	Browns (Potter).....	1	At Sportsman's Park

1945—DETROIT A. L. (4) vs. CHICAGO N. L. (3)

Managers—Stephen F. O'Neill, Detroit; Charles J. Grimm, Chicago.

Oct. 3—Chicago (Borowy).....	9	Detroit (Newhouser).....	0	At Detroit
Oct. 4—Detroit (Trucks).....	4	Chicago (Wyse).....	1	At Detroit
Oct. 5—Chicago (Passeau).....	3	Detroit (Overmire).....	0	At Detroit
Oct. 6—Detroit (Trout).....	4	Chicago (Prim).....	1	At Chicago
Oct. 7—Detroit (Newhouser).....	8	Chicago (Borowy).....	4	At Chicago
Oct. 8—Chicago (Borowy).....	8	Detroit (Trout).....	7	At Chicago (12 inn.)
Oct. 10—Detroit (Newhouser).....	9	Chicago (Borowy).....	3	At Chicago

1946—ST. LOUIS N. L. (4) vs. BOSTON A. L. (3)

Managers—Edwin H. Dyer, St. Louis; Joseph E. Cronin, Boston.

Oct. 6—Boston (Johnson).....	3	St. Louis (Poliet).....	2	At St. Louis (10 innings)
Oct. 7—St. Louis (Brecheen).....	3	Boston (Harris).....	0	At St. Louis
Oct. 9—Boston (Ferriss).....	4	St. Louis (Dickson).....	0	At Boston
Oct. 10—St. Louis (Munger).....	12	Boston (Hughson).....	3	At Boston
Oct. 11—Boston (Dobson).....	6	St. Louis (Brazle).....	3	At Boston
Oct. 13—St. Louis (Brecheen).....	4	Boston (Harris).....	1	At St. Louis
Oct. 15—St. Louis (Brecheen).....	4	Boston (Klinger).....	3	At St. Louis

1947—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Stanley R. Harris, New York; Burton E. Shotton, Brooklyn.

Sept. 30—New York (Shea).....	5	Brooklyn (Branca).....	3	At New York
Oct. 1—New York (Reynolds).....	10	Brooklyn (Lombardi).....	3	At New York
Oct. 2—Brooklyn (Casey).....	9	New York (Newsom).....	8	At Brooklyn
Oct. 3—Brooklyn (Casey).....	3	New York (Bevens).....	2	At Brooklyn
Oct. 4—New York (Shea).....	2	Brooklyn (Barney).....	1	At Brooklyn
Oct. 5—Brooklyn (Branca).....	8	New York (Page).....	6	At New York
Oct. 6—New York (Page).....	5	Brooklyn (Gregg).....	2	At New York

1948—CLEVELAND A. L. (4) vs. BOSTON N. L. (2)

Managers—Louis Boudreau, Cleveland; William H. Southworth, Boston.

Oct. 6—Boston (Sain).....	1	Cleveland (Feller).....	0	At Boston
Oct. 7—Cleveland (Lemon).....	4	Boston (Spahn).....	1	At Boston
Oct. 8—Cleveland (Bearden).....	2	Boston (Bickford).....	0	At Cleveland
Oct. 9—Cleveland (Gromek).....	2	Boston (Sain).....	1	At Cleveland
Oct. 10—Boston (Spahn).....	11	Cleveland (Feller).....	5	At Cleveland
Oct. 11—Cleveland (Lemon).....	4	Boston (Voiselle).....	3	At Boston

1949—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Charles D. Stengel, New York; Burton E. Shotton, Brooklyn.

Oct. 5—New York (Reynolds).....	1	Brooklyn (Newcombe).....	0	At New York
Oct. 6—Brooklyn (Roe).....	1	New York (Raschi).....	0	At New York
Oct. 7—New York (Page).....	4	Brooklyn (Branca).....	3	At Brooklyn
Oct. 8—New York (Lopat).....	6	Brooklyn (Newcombe).....	4	At Brooklyn
Oct. 9—New York (Raschi).....	10	Brooklyn (Barney).....	6	At Brooklyn

1950 World Series Statistics

Composite Box Score

NEW YORK YANKEES

	BATS	G	AB	R	H	2B	3B	HR	RBI	BAT	AVG.
Woodling, lf.....	L	4	14	2	6	0	0	0	1	.429	
Rizzuto, ss.....	R	4	14	1	2	0	0	0	0	.143	
Berra, c.....	R	4	15	2	3	0	0	1	2	.200	
DiMaggio, cf.....	R	4	13	2	4	1	0	1	2	.308	
Mize, lb.....	L	4	15	0	2	0	0	0	0	.133	
Hopp, lb.....	L	3	2	0	0	0	0	0	0	.000	
Collins, lb.....	L	1	0	0	0	0	0	0	0	.000	
Brown, 3b.....	L	4	12	2	4	1	0	1	1	.333	
Johnson, 3b.....	R	4	16	0	0	0	0	0	0	.000	
Bauer, rf-lf.....	R	4	15	0	2	0	0	1	1	.133	
Mapes, rf.....	L	1	4	0	0	0	0	0	0	.000	
Coleman, 2b.....	R	4	14	2	4	1	0	0	3	.286	
Jensen.....	R	1	0	0	0	0	0	0	0	.000	
Raschi, p.....	R	1	3	0	1	0	0	0	0	.333	
Reynolds, p.....	R	2	3	0	1	0	0	0	0	.333	
Lopat, p.....	R	1	2	0	1	0	0	0	0	.500	
Ferrick, p.....	R	1	0	0	0	0	0	0	0	.000	
Ford, p.....	L	1	3	0	0	0	0	0	0	.000	
Totals.....			135	11	30	3	1	2	10	.222	

PHILADELPHIA PHILLIES

	BATS	G	AB	R	H	2B	3B	HR	RBI	BAT	AVG.
Waitkus, lb.....	L	4	15	0	4	1	0	0	0	.267	
Ashburn, cf.....	L	4	17	0	3	1	0	0	1	.176	
Sisler, lf.....	L	4	17	0	1	0	0	0	1	.059	
K. Johnson.....	L	1	0	1	0	0	0	0	0	.000	
Ennis, rf.....	R	4	14	1	2	1	0	0	0	.143	
Jones, 3b.....	R	4	14	1	4	1	0	0	0	.286	
Hamner, ss.....	R	4	14	1	6	2	1	0	0	.429	
Seminick, c.....	R	4	11	0	2	0	0	0	0	.182	
Caballero.....	R	3	1	0	0	0	0	0	0	.000	
Silvestri, c.....	L	1	0	0	0	0	0	0	0	.000	
Whitman.....	L	3	2	0	0	0	0	0	0	.000	
Lopata, c.....	R	2	1	0	0	0	0	0	0	.000	
Gollat, 2b.....	R	4	14	1	3	0	0	1	1	.214	
Bloodworth, 2b.....	R	1	0	0	0	0	0	0	0	.000	
Konstanty, p.....	R	3	4	0	1	0	0	0	0	.250	
Meyer, p.....	L	2	0	0	0	0	0	0	0	.000	
Roberts, p.....	L	2	2	0	0	0	0	0	0	.000	
Mayo, lf.....	R	3	0	0	0	0	0	0	0	.000	
Heintzelman, p.....	R	1	2	0	0	0	0	0	0	.000	
Miller, p.....	R	1	0	0	0	0	0	0	0	.000	
Totals.....			128	5	26	6	1	0	3	.203	

Caballero ran for Seminick in 7th, 2d game; ran for Gollat in 9th, 3d game; struck out for Konstanty in 8th, 4th game.
 Whitman fled out for Konstanty in 8th, 1st game; was intentionally walked for Silvestri in 9th, 2d game; hit fielder's choice in 9th, 3d game.
 Mayo walked for Roberts in 10th, 2d game; ran for Seminick in 9th, 4th game.
 K. Johnson ran for Sisler in 9th, 4th game.
 Lopata struck out for Roberts in 9th, 4th game.
 Jensen ran for Brown in 8th, 3d game.

COMPOSITE SCORE BY INNINGS

New York Yankees.....	2	1	1	1	0	3	0	1	1	1-11
Philadelphia Phillies.....	0	0	0	0	1	1	0	0	2	0-5

PITCHING SUMMARY

	Throws	G	Complete games	IP	H	R	Earned runs	BB	SO	HB	WP	W	L	Pct.	ERA
Raschi.....	R	1	1	9	2	0	0	1	5	0	0	1	0	1.000	0.00
Reynolds.....	R	2	1	10 1/3	7	1	1	4	7	0	0	1	0	1.000	0.90
Lopat.....	L	1	0	8	9	2	2	0	5	0	0	0	0	.000	2.25
Ferrick.....	R	1	0	8 2/3	7	2	0	1	7	0	0	1	0	1.000	0.00
Ford.....	L	1	0	8 2/3	7	2	0	1	7	0	0	1	0	1.000	0.00
Konstanty.....	R	3	0	15	9	4	4	4	3	1	0	0	1	.000	2.40
Meyer.....	R	2	0	1 2/3	4	1	1	0	1	0	0	0	1	.000	4.50
Roberts.....	R	2	1	11	11	2	2	3	5	0	0	0	1	.000	1.64
Heintzelman.....	L	1	0	7 2/3	4	2	1	6	3	0	0	0	0	.000	1.13
Miller.....	R	1	0	1 1/3	2	2	1	0	0	0	1	0	1	.000	27.00

Sacrifices—Rizzuto, Raschi, Roberts, Waitkus, Seminick 2, Heintzelman, Jones. Stolen bases—Hamner, Rizzuto. Double plays—Johnson, Coleman and Hopp; Rizzuto, Coleman and Hopp; Mize and Berra; Coleman, Rizzuto and Mize; Hamner and Waitkus. Left on bases—New York 33, Philadelphia 26. Hit by pitcher—By Konstanty (DiMaggio); by Ford (Ennis), Umpires—Jocko Conlan (N); Bill McGowan (A); Dusty Boggess (N); Charlie Berry (A); Al Barlick (N); Bill McKinley (A). Attendances—30,746 (first game); 32,660 (second); 64,505 (third); 68,098 (fourth). Times of games—2:17 (first); 3:06 (second); 2:35 (third); 2:05 (fourth).

1950 Players' World Series Split

	Full share
New York Yankees (32 shares)	\$5,737.95
Philadelphia Phillies (32 shares) ...	4,081.34
Detroit Tigers (2d place)	1,042.23
Brooklyn Dodgers (2d place)	1,128.18
Boston Red Sox (3d place)	736.93
New York Giants (3d place)	736.93
Cleveland Indians (4th place)	347.41
Boston Braves (4th place)	334.66

Series TV Sold for \$800,000

Television rights for the 1950 world series cost the record sum of \$800,000, an outlay of \$200,000 per game as the Yankees captured four straight from the Phillies.

Each member of the Cleveland Indians entitled to a full winning share in the 1948 world series with the Boston Braves received \$6,772.05, the record for the classic.

FIRST GAME—At Philadelphia, Oct. 4

NEW YORK (A)							
	AB	R	H	PO	A	E	
Woodling, lf.....	3	0	1	1	0	0	
Rizzuto, ss.....	3	0	1	0	2	0	
Berra, c.....	4	0	0	7	0	0	
DiMaggio, cf.....	2	0	0	3	0	0	
Mize, 1b.....	4	0	0	7	0	0	
Hopp, 1b.....	0	0	0	7	0	0	
Brown, 3b.....	4	1	1	0	0	0	
Johnson, 3b.....	0	0	0	0	0	0	
Bauer, rf.....	4	0	1	5	0	0	
Coleman, 2b.....	4	0	0	1	2	0	
Raschi, p.....	3	0	1	0	3	0	
Total.....	31	1	5	27	7	0	

PHILADELPHIA (N)

	AB	R	H	PO	A	E	
Waitkus, 1b.....	3	0	0	9	2	0	
Ashburn, cf.....	4	0	0	2	0	0	
Sisler, lf.....	4	0	0	3	0	0	
Ennis, rf.....	3	0	0	4	0	0	
Jones, 3b.....	3	0	1	4	3	1	
Hamner, ss.....	3	0	1	0	1	0	
Seminick, c.....	3	0	1	1	1	0	
Goliath, 2b.....	3	0	0	3	2	0	
Konstanty, p.....	2	0	0	1	0	0	
aWhitman.....	1	0	0	0	0	0	
Meyer, p.....	0	0	0	0	1	0	
Total.....	29	0	2	27	10	1	

aFiled out for Konstanty in eighth.

New York.....	0	0	0	1	0	0	0	0	1
Philadelphia.....	0	0	0	0	0	0	0	0	0

Run batted in—Coleman.

Two-base hit—Brown. Sacrifices—Rizzuto, Raschi. Left on bases—New York 9, Philadelphia 3. Bases on balls—Off Konstanty 4 (Woodling 2, DiMaggio 2); Raschi 1 (Waitkus). Struck out—By Raschi 5 (Seminick, Sisler 2, Goliath, Konstanty). Hits—Off Konstanty 4 in 8 innings, Meyer 1 in 1. Loser—Konstanty.

Umpires—Conlan (N), plate; McGowan (A), 1b; Boggess (N), 2b; Berry (A), 3b; Barlick (N), lf; McKinley (A), rf. Time—2:17. Attendance—30,746.

SECOND GAME—At Philadelphia, Oct. 5

NEW YORK (A)

	AB	R	H	PO	A	E	
Woodling, lf.....	5	0	2	2	0	0	
Rizzuto, ss.....	4	0	0	2	1	0	
Berra, c.....	5	0	1	7	0	0	
DiMaggio, cf.....	5	1	1	3	0	0	
Mize, 1b.....	4	0	1	6	0	0	
Johnson, 3b.....	1	0	0	0	2	0	
Brown, 3b.....	4	0	2	0	0	0	
Hopp, 1b.....	1	0	0	3	0	0	
Bauer, rf.....	5	0	1	0	0	0	
Coleman, 2b.....	3	1	1	5	6	0	
Reynolds, p.....	3	0	1	1	2	0	
Total.....	40	2	10	30	11	0	

PHILADELPHIA (N)

	AB	R	H	PO	A	E	
Waitkus, 1b.....	4	0	2	8	0	0	
Ashburn, cf.....	5	0	2	4	0	0	
Sisler, lf.....	5	0	0	3	0	0	
Ennis, rf.....	4	0	0	1	0	0	
Jones, 3b.....	4	0	0	3	0	0	
Hamner, ss.....	3	0	2	2	2	0	
Seminick, c.....	2	0	0	5	0	0	
aCaballero.....	0	0	0	0	0	0	
Silvestri, c.....	0	0	0	1	0	0	
bWhitman.....	0	0	0	0	0	0	
Lopata, c.....	0	0	0	1	0	0	
Goliath, 2b.....	4	1	1	2	2	0	
Roberts, p.....	2	0	0	0	0	0	
cMayo.....	0	0	0	0	0	0	
Total.....	33	1	7	30	4	0	

aRan for Seminick in seventh.

bIntentionally walked for Silvestri in ninth.

cWalked for Roberts in tenth.

New York..... 0 1 0 0 0 0 0 0 0 1—2
Philadelphia..... 0 0 0 0 1 0 0 0 0 0—1

Runs batted in—Woodling, Ashburn, DiMaggio. Two-base hits—Ashburn, Waitkus, Coleman, Hamner. Three-base hit—Hamner. Home run—DiMaggio. Stolen base—Hamner. Sacrifices—Roberts, Waitkus. Double plays—Johnson, Coleman and Hopp; Rizzuto, Coleman and Hopp. Left

on bases—New York 11, Philadelphia 8. Bases on balls—Off Roberts 3 (Coleman, Reynolds, Rizzuto); Reynolds 4 (Hamner, Seminick, Whitman, Mayo). Struck out—By Reynolds 6 (Sisler 2, Jones, Roberts, Ennis, Seminick); Roberts 5 (Berra, Mize, Reynolds 2, Johnson).

Umpires—McGowan (A), plate; Boggess (N), 1b; Berry (A), 2b; Conlan (N), 3b; McKinley (A), lf; Barlick (N), rf. Time—3:06. Attendance—32,660.

THIRD GAME—At New York, Oct. 6

PHILADELPHIA (N)

	AB	R	H	PO	A	E	
Waitkus, 1b.....	5	0	1	8	0	0	
Ashburn, cf.....	4	0	1	0	0	0	
Jones, 3b.....	3	0	1	1	2	0	
Ennis, rf.....	4	1	1	3	0	0	
Sisler, lf.....	4	0	1	2	1	0	
Mayo, lf.....	0	0	0	1	0	0	
Hamner, ss.....	4	1	3	2	2	1	
Seminick, c.....	2	0	1	5	0	1	
Goliath, 2b.....	3	0	1	4	1	0	
bCaballero.....	0	0	0	0	0	0	
Bloodworth, 2b.....	0	0	0	0	0	0	
Heintzelman, p.....	2	0	0	0	2	0	
Konstanty, p.....	0	0	0	0	0	0	
aWhitman.....	1	0	0	0	0	0	
Meyer, p.....	0	0	0	0	0	0	
Total.....	32	2	10	26	8	2	

NEW YORK (A)

	AB	R	H	PO	A	E	
Rizzuto, ss.....	3	1	1	1	1	0	
Coleman, 2b.....	4	1	3	3	1	0	
Berra, c.....	2	0	0	6	1	0	
DiMaggio, cf.....	3	0	1	1	0	0	
Bauer, lf.....	3	0	0	0	1	0	
cBrown.....	0	0	0	0	0	0	
dJensen.....	0	0	0	0	0	0	
Ferrick, p.....	0	0	0	0	0	0	
Mize, 1b.....	4	0	0	9	2	0	
Collins, 1b.....	0	0	0	1	1	0	
Johnson, 3b.....	4	0	0	1	3	0	
Mapes, rf.....	4	0	0	3	0	0	
Lopat, p.....	2	0	1	1	4	0	
Woodling, lf.....	2	1	1	0	0	0	
Total.....	32	3	7	27	13	0	

*Two out when winning run scored.

aHit into fielder's choice for Konstanty in ninth.

bRan for Goliath in ninth.

cSafe on error for Bauer in eighth.

dRan for Brown in eighth.

Philadelphia.....	0	0	0	0	0	1	1	0	0—2
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New York.....	0	0	1	0	0	0	1	1—3
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Runs batted in—Coleman 2, Sisler, Goliath.

Two-base hits—Ennis, Hamner. Stolen base—Rizzuto. Sacrifices—Seminick 2, Heintzelman, Jones. Double play—Hamner and Waitkus. Left on bases—Philadelphia 8, New York 9. Bases on balls—Off Heintzelman 6 (Rizzuto 2, Berra 2, Coleman, DiMaggio); Ferrick 1 (Goliath). Struck out—By Lopat 5 (Ashburn 3, Seminick, Jones); Meyer 1 (Mapes); Heintzelman 3 (Johnson 2, Lopat). Hits—Off Lopat 9 in 8 innings, Heintzelman 4 in 7 2-3, Konstanty 0 in 1-3, Meyer 3 in 2-3, Ferrick 1 in 1. Winner—Ferrick. Loser—Meyer.

Umpires—Boggess (N), plate; Berry (A), 1b; Conlan (N), 2b; McGowan (A), 3b; Barlick (N), lf; McKinley (A), rf. Time—2:35. Attendance—64,505.

FOURTH GAME—At New York, Oct. 7

PHILADELPHIA (N)

	AB	R	H	PO	A	E	
Waitkus, 1b.....	3	0	1	9	1	0	
Ashburn, cf.....	4	0	0	3	0	0	
Jones, 3b.....	4	1	2	0	4	0	
Ennis, rf.....	3	0	1	1	0	0	
Sisler, lf.....	4	0	0	2	0	0	
bK. Johnson.....	0	0	0	0	0	0	
Hamner, ss.....	4	0	1	2	2	0	
Seminick, c.....	4	0	0	3	1	0	
cMayo.....	0	0	0	0	0	0	
Goliath, 2b.....	4	0	1	4	4	1	
Miller, p.....	0	0	0	0	0	0	
Konstanty, p.....	2	0	1	0	1	0	
aCaballero.....	1	0	0	0	0	0	
Roberts, p.....	0	0	0	0	0	0	
dLopat.....	1	0	0	0	0	0	
Total.....	34	2	7	24	13	1	

NEW YORK (A)

	AB	R	H	PO	A	E
Woodling, lf.....	4	1	2	4	0	1
Rizzuto, ss.....	4	0	0	2	4	0
Berra, c.....	4	2	2	10	0	0
DiMaggio, cf.....	3	2	1	0	0	0
Mize, 1b.....	3	0	1	5	1	0
Hopp, 1b.....	1	0	0	1	1	0
Brown, 3b.....	3	1	1	0	1	1
W. Johnson, 3b.....	1	0	0	0	0	0
Bauer, rf.....	3	0	0	1	0	0
Coleman, 2b.....	3	0	0	2	3	0
Ford, p.....	3	0	0	1	0	0
Reynolds, p.....	0	0	0	0	0	0
Total.....	32	5	8	27	10	2

aStruck out for Konstanty in eighth.

bRan for Sisler in ninth.

cRan for Seminick in ninth.

dStruck out for Roberts in ninth.

Philadelphia.....	0	0	0	0	0	0	2-2
New York.....	2	0	0	0	3	0	-5

Runs batted in—Berra 2, DiMaggio, Brown, Bauer.

Two-base hits—Jones, DiMaggio. Three-base hit—Brown. Home run—Berra. Double plays—Mize and Berra; Coleman, Rizzuto and Mize. Left on bases—Philadelphia 7, New York 4. Bases on balls—Off Ford 1 (Waltkus). Struck out—By Ford 7, (Sisler, Ashburn, Goliat, Jones, Hamner 2, Caballero); Konstanty 3, (Ford 2, DiMaggio); Reynolds 1 (Lopata). Hits—Off Miller 2 in 1-3 innings, Konstanty 5 in 6-2-3, Roberts 1 in 1, Ford 7 in 8-2-3, Reynolds 0 in 1-3. Hit by pitcher—By Konstanty (DiMaggio), by Ford (Egan). Wild pitch—Miller. Winner—Ford. Loser—Miller.

Umpires—Berry (A), plate; Conlan (N), 1b; McGowan (A), 2b; Hoggess (N), 3b; McKinley (A), lf; Barlick (N), rf. Time—2:05. Attendance—68,098.

OTHER 1950 SERIES STATISTICS

Final Standing of Clubs

	Won	Lost	Pct
New York Yankees	4	0	1.000
Philadelphia Phillies	0	4	.000

Four-Game Totals

Attendance—196,009.

* Receipts—\$953,669.03.

Commissioner's share—\$143,050.35.

† Players' share—\$486,371.21.

Clubs' and leagues' share—\$324,247.47.

* Does not include radio and television fee of \$975,000.
† Players share in receipts of first four games.

RUTH'S BASEBALL EARNINGS

Year	Club	Salary
1914	Baltimore (I).....	\$ 600
1914*	Boston (A).....	1,300
1915	Boston (A).....	3,500
1916	Boston (A).....	3,500
1917	Boston (A).....	5,000
1918	Boston (A).....	7,000
1919	Boston (A).....	10,000
1920	New York (A).....	20,000
1921	New York (A).....	30,000
1922	New York (A).....	32,000
1923	New York (A).....	32,000
1924	New York (A).....	32,000
1925	New York (A).....	52,000
1926	New York (A).....	52,000
1927	New York (A).....	70,000
1928	New York (A).....	70,000
1929	New York (A).....	70,000
1930	New York (A).....	80,000
1931	New York (A).....	80,000
1932	New York (A).....	75,000
1933	New York (A).....	50,000
1934	New York (A).....	35,000
1935	Boston (N).....	40,000
1938†	Brooklyn (N).....	15,000
Total.....		\$925,900

* Bought by Boston Americans from Baltimore and farmed to Providence (I). † Coach.

Ruth's share from ten world series amounted to \$41,445. In addition, he was paid to participate in \$1,000,000 from endorsements, barnstorming tours, movies and radio appearances.

World Series Club Standing

	Series	Won	Lost	Pct.
Cleveland (A).....	2	2	0	1.000
Boston (A).....	6	5	1	.833
New York (A).....	17	13	4	.765
St. Louis (N).....	9	6	3	.667
Cincinnati (N).....	3	2	1	.667
Chicago (A).....	3	2	1	.667
Philadelphia (A).....	8	5	3	.625
Boston (N).....	2	1	1	.500
Pittsburgh (N).....	4	2	2	.500
New York (N).....	12	4	8	.333
Washington (A).....	3	1	2	.333
Detroit (A).....	7	2	5	.286
Chicago (N).....	10	2	8	.200
St. Louis (A).....	1	0	1	.000
Philadelphia (N).....	2	0	2	.000
Brooklyn (N).....	5	0	5	.000

RECAPITULATION

	Won
American League.....	30
National League.....	17

HOME ATTENDANCE FIGURES

(Unofficial)

	American League	Other club records
1950	1949	
New York.....	2,081,375	2,283,676
Detroit.....	1,959,478*	1,821,204
Cleveland.....	1,722,335	2,233,771
Boston.....	1,344,005	1,596,650*
Chicago.....	782,141	937,151
Washington.....	696,592	1,027,316
St. Louis.....	313,944	712,918
Philadelphia.....	310,085	816,514
Totals.....	9,201,655	10,730,647

* Club record. Cleveland's 1948 total is the record for the major leagues.

National League

	1950	1949	Other club records
Philadelphia.....	1,217,080*	819,698	
Brooklyn.....	1,185,099	1,633,747	1,807,526 (1947)
Pittsburgh.....	1,167,793	1,449,435	1,517,021 (1948)
St. Louis.....	1,099,530	1,430,676*	
New York.....	1,009,951	1,218,446	1,600,793 (1947)
Boston.....	944,391	1,081,795	1,455,439 (1948)
Chicago.....	858,776	1,143,139	1,485,166 (1929)
Cincinnati.....	542,549	707,782	981,443 (1939)
Totals.....	8,025,169	9,484,718	
Grand totals.....	17,226,824	20,215,365	

Connie Mack Steps Down

Connie Mack, baseball's "grand old man," resigned as manager of the Philadelphia Athletics on Oct. 18, 1950, after 50 consecutive years as pilot of the team. Jimmie Dykes, a member of Mr. Mack's championship clubs of 1929, 1930, 1931, was appointed his successor.

Indians-Braves Set All-Time Marks

All-time attendance and receipts records for a baseball game were set in the fifth contest of the 1948 world series between the Cleveland Indians and Boston Braves at Municipal Stadium, Cleveland, on Oct. 10. The crowd of 86,288 paid \$378,778.73.

MAJOR LEAGUE STATISTICS

Source: American League and National League Service Bureaus.

lf—Left-field foul line; cf—center field; rf—right-field foul line. (2)—Indicates double-header scheduled.

American League

Club, nickname and grounds	lf	cf	rf	Seating capacity	Record attendance	Visiting club	Date
Boston Red Sox—Fenway Park.....	315	420	302	34,239	41,766	New York (2).....	Aug. 12, 1934
Chicago White Sox—Comiskey Park.....	352	415	352	47,400	53,325	Cleveland (2).....	May 15, 1949
Cleveland Indians—Municipal Stadium.....	321	410	321	73,500	82,781	Philadelphia (2).....	June 20, 1948
Detroit Tigers—Briggs Stadium.....	340	440	325	52,954	58,369	New York (2).....	July 20, 1947
New York Yankees—Yankee Stadium.....	301	461	296	67,000	81,841	Boston (2).....	May 30, 1938
Philadelphia Athletics—Shibe Park.....	334	420	331	33,223	38,800	Washington (2).....	July 13, 1931
St. Louis Browns—Sportsman's Park.....	351	422	310	32,965	34,625	New York.....	Oct. 1, 1944
Washington Senators—Griffith Stadium.....	405	420	328	28,000	35,563	New York (2).....	July 4, 1936

National League

Boston Braves—Braves Field.....	337	390	319	41,000	47,123	Philadelphia (2).....	May 22, 1932
Brooklyn Dodgers—Ebbets Field.....	343	405	297	32,111	41,209	New York (2).....	May 30, 1934
Chicago Cubs—Wrigley Field.....	355	400	353	38,690	46,965	Pittsburgh (2).....	May 31, 1948
Cincinnati Reds—Crosley Field.....	328	387	342	30,000	36,961	Pittsburgh (2).....	Apr. 27, 1947
New York Giants—Polo Grounds.....	279	484	257	55,000	60,747	Brooklyn (2).....	May 31, 1937
Philadelphia Phillies—Shibe Park.....	334	420	331	33,223	40,952	Brooklyn (2).....	May 11, 1947
Pittsburgh Pirates—Forbes Field.....	335	457	300	33,730	43,586	New York (2).....	Aug. 31, 1938
St. Louis Cardinals—Sportsman's Park.....	351	422	310	32,965	45,770	Chicago (2).....	July 12, 1931

Chart of 1950 Major League Pennant Races

Monday Morning Standings

American League	APR. 24	MAY					JUNE					JULY					AUGUST					SEPTEMBER					OCTOBER 2
		1	8	15	22	29	5	12	19	26		3	10	17	24	31	7	14	21	28		4	11	18	25		
New York.....	2	2	3	2	1	1	1	2	2	2		2	2	2	1	1	2	2	2	2		1	2	1	1		1
Detroit.....	1	1	1	1	2	2	2	1	1	1		1	1	1	2	1	1	1	1	1		2	1	2	2		2
Boston.....	6	5	2	3	4	3	3	4	4	4		4	4	4	4	4	4	4	4	4		3	3	3	3		3
Cleveland.....	2	2	3	5	5	4	4	3	3	3		3	3	3	3	3	3	3	3	3		4	4	4	4		4
Washington.....	4	4	4	4	4	3	5	5	5	5		5	5	5	5	5	5	5	5	5		5	5	5	5		5
Chicago.....	8	7	7	7	8	8	7	6	6	6		5	6	6	6	6	6	6	6	6		6	6	6	6		6
St. Louis.....	7	6	8	7	7	8	8	8	7	8		8	7	7	8	7	7	8	7	8		7	7	7	7		7
Philadelphia.....	4	7	6	6	6	6	6	7	7	7		7	7	7	8	7	7	8	7	8		8	7	8	8		8

National League	APR. 24	MAY					JUNE					JULY					AUGUST					SEPTEMBER					OCTOBER 2
		1	8	15	22	29	5	12	19	26		3	10	17	24	31	7	14	21	28		4	11	18	25		
Philadelphia.....	5	4	2	1	2	1	3	3	3	2		1	2	1	3	4	1	1	1	1		1	1	1	1		1
Brooklyn.....	4	1	1	3	1	2	1	2	2	1		4	4	4	3	4	3	3	2	2		2	2	3	2		2
New York.....	7	8	7	7	7	7	6	6	6	6		6	6	6	5	5	5	5	5	5		4	4	4	4		3
Boston.....	3	4	3	5	3	4	4	5	4	4		3	3	3	4	3	2	2	3	3		3	3	2	3		4
St. Louis.....	6	4	4	2	3	3	1	1	1	3		2	2	1	2	2	4	4	4	4		5	5	5	5		5
Cincinnati.....	7	2	6	8	4	8	8	8	8	8		7	7	7	7	7	7	6	7	7		7	6	6	6		6
Chicago.....	1	2	6	4	6	5	5	4	5	5		5	5	5	6	6	6	7	6	6		6	7	7	7		7
Pittsburgh.....	2	1	3	4	6	5	7	7	7	7		7	8	8	8	8	8	8	8	8		8	8	8	8		8

Longest Game in the Majors

The 26-inning 1-1 tie game between Brooklyn and Boston of the National League, played at Braves Field, Boston, on May 1, 1920, still stands as the longest contest in major league history. Both pitchers, Joe Oeschger of the Braves and Leon Cadore of the Robins, as they were then called because they were managed by Wilbert Robinson, went the distance. George (Miracle Man) Stallings guided Boston. The game was called because of darkness.

Phils Take Marathon Game

A nineteen-inning battle between the Cincinnati Reds and the Phillies at Philadelphia, the second game of a twilight-night twin bill on Sept. 16, was the longest in the major leagues last season. The Phils won, 8-7.

TOP ALL-TIME HOME-RUN HITTERS

AMERICAN LEAGUE		NATIONAL LEAGUE	
	Total		Total
Babe Ruth.....	714	Mel Ott.....	511
Jimmy Foxx.....	534	Johnny Mize.....	341
Lou Gehrig.....	493	Chuck Klein.....	300
Joe DiMaggio.....	349	Rogers Hornsby.....	299
Hank Greenberg.....	309	Fred (Cy) Williams.....	251
Al Simmons.....	307	Hack Wilson.....	244
Ted Williams.....	293	Wally Berger.....	242
Bob Johnson.....	288	Dolph Camilli.....	237
Rudy York.....	277	Gabby Hartnett.....	236
Joe Gordon.....	253	Bill Nicholson.....	219
Goose Goslin.....	248	Ralph Kiner.....	215

NOTE—Several of the players were active in both leagues. Combined totals are credited to the league in which they served longest.

MAJOR LEAGUE RECORDS FOR 1950

American League

Final Standing of the Clubs

	New York	Detroit	Boston	Cleveland	Washington	Chicago	St. Louis	Philadelphia	Winnipeg	Lost	Percentage	Games Behind
New York	—	11	13	14	14	17	15	98	56	.636	—	—
Detroit	11	—	12	9	13	16	17	95	59	.617	3	—
Boston	9	10	—	10	12	15	19	94	60	.610	4	—
Cleveland	8	13	12	—	15	14	13	17	92	.62	.597	6
Washington	8	9	10	7	—	14	10	9	67	.87	.435	31
Chicago	8	6	7	8	8	—	12	11	60	.94	.390	38
St. Louis	5	5	3	9	12	10	—	14	58	.96	.377	40
Philadelphia	7	5	3	5	13	11	8	—	52	102	.338	46
Lost	56	59	60	62	87	94	96	102	—	—	—	—

National League

Final Standing of the Clubs

	Philadelphia	Brooklyn	New York	Boston	St. Louis	Cincinnati	Chicago	Pittsburgh	Winnipeg	Lost	Percentage	Games Behind
Philadelphia	—	11	10	13	12	18	13	14	91	63	.591	—
Brooklyn	11	—	12	13	12	12	10	19	89	65	.578	2
New York	12	10	—	9	11	17	16	86	68	.558	5	—
Boston	9	9	13	—	11	17	9	15	83	71	.539	8
St. Louis	10	10	11	11	—	15	12	9	76	75	.510	12½
Cincinnati	4	10	11	5	7	—	17	12	66	87	.431	24½
Chicago	9	12	5	13	10	4	—	11	64	89	.418	26½
Pittsburgh	8	3	6	7	12	10	11	—	57	96	.373	33½
Lost	63	65	68	71	75	87	89	96	—	—	—	—

THE LEADERS

American League

Batting—Billy Goodman, Boston	354
Runs—Dom DiMaggio, Boston	131
Runs batted in—Vern Stephens, Boston Walt Dropo, Boston	144
Hits—George Kell, Detroit	218
Doubles—George Kell, Detroit Dom DiMaggio, Boston	56
Triples—Bobby Doerr, Boston Hoot Evers, Detroit	11
Home runs—Al Rosen, Cleveland	37
Stolen bases—Dom DiMaggio, Boston	15
Pitching—Ed Ford, New York (W 9, L 1)	900
Strikeouts—Bob Lemon, Cleveland	172

National League

Batting—Stan Musial, St. Louis	345
Runs—Earl Torgeson, Boston	170
Runs batted in—Del Ennis, Philadelphia	125
Hits—Duke Snider, Brooklyn	139
Doubles—Red Schoendienst, St. Louis	43
Triples—Richie Ashburn, Philadelphia	11
Home runs—Ralph Kiner, Pittsburgh	47
Stolen bases—Sam Jethroe, Boston	35
Pitching—Sal Maglie, New York (W 18, L 4)	818
Strikeouts—Warren Spahn, Boston	191

Unofficial Averages

INDIVIDUAL BATTING

	g	ab	r	h	hr	rbi	avg.
Goodman, Boston	110	424	90	160	4	68	.354
Kell, Detroit	157	640	114	218	8	97	.341
DiMaggio, Boston	141	589	131	192	7	67	.326
Rizzuto, New York	155	617	125	200	7	66	.324
Doby, Cleveland	142	503	111	163	25	100	.324
Dropo, Boston	136	558	100	180	34	144	.323
Evers, Detroit	143	526	99	170	21	101	.323
Zarilla, Boston	130	472	92	152	9	76	.322
Bauer, New York	113	414	74	133	13	68	.321
Wright, Boston	54	106	17	34	0	20	.321
Berra, New York	151	597	115	191	28	125	.320
Raker, Chicago	83	187	26	59	0	11	.316
Williams, Boston	89	333	83	105	28	97	.315
Keller, Detroit	50	51	6	16	2	16	.314
Pesky, Boston	127	490	112	153	1	46	.312
Dillingham, Phila.	84	355	54	110	3	40	.310
Luhner, Philadelphia	114	427	47	132	9	51	.309
Wertz, Chicago	122	414	47	128	6	47	.309
Majeski, Chicago	149	558	98	172	27	123	.308
Tobin, Boston	79	268	33	82	3	44	.306
Greth, Detroit	157	565	94	172	12	86	.304
Nichols, Cleveland	131	510	83	155	3	49	.304
Avila, Cleveland	60	198	38	60	1	21	.303
DiMaggio, New York	139	521	114	158	32	122	.301
Corn, Washington	104	365	58	110	7	48	.301
Scano, Cleveland	109	365	59	109	8	55	.299
Ligon, Detroit	147	601	106	179	2	60	.298
Loon, Boston	149	580	105	172	25	120	.297
Yost, Washington	155	573	115	170	11	56	.297
Stephens, Boston	149	627	126	185	30	144	.295
Kennedy, Cleveland	146	539	78	159	9	54	.295
Robinson, Wash.-Chi.	154	554	81	163	20	84	.294
Noren, Washington	139	544	78	160	14	99	.294
Rosen, Cleveland	155	556	105	162	37	110	.291
Kellaway, Detroit	125	468	61	135	6	61	.288
Coleman, New York	103	522	70	150	6	68	.287
Grasso, Washington	74	196	25	56	1	22	.286
Vale, Philadelphia	123	436	64	124	10	44	.284
Vollmer, Wash.-Bost.	62	183	38	52	7	38	.284

INDIVIDUAL BATTING

	g	ab	r	h	hr	rbi	avg.
Musial, St. Louis	146	555	105	192	28	108	.346
Hopp, Pittsburgh	105	318	51	108	8	41	.340
Robinson, Brooklyn	144	518	99	170	14	81	.328
Snider, Brooklyn	152	620	109	199	31	106	.321
Ennis, Philadelphia	153	595	91	186	31	123	.313
Cooper, Cinc.-Boston	117	384	56	120	14	64	.313
Kluszewski, Cincinnati	134	538	76	165	25	111	.307
Pramesa, Cincinnati	74	228	15	70	5	30	.307
Furillo, Brooklyn	154	620	99	189	18	106	.305
Elliott, Boston	142	531	94	162	24	108	.305
Gordon, Chicago	146	514	94	156	36	92	.304
Gordon, Boston	134	481	79	146	27	109	.304
Ashburn, Philadelphia	151	594	84	180	2	39	.303
Holmes, Boston	104	316	44	95	9	52	.301
Stanky, New York	152	527	116	158	8	62	.300
Irvin, New York	110	373	62	112	15	65	.300
Sisler, Philadelphia	141	523	79	156	13	83	.298
Hermanski, Brooklyn	94	289	36	86	7	32	.298
Lockman, New York	129	531	73	157	6	51	.296
Phillips, Pittsburgh	69	207	24	61	5	33	.295
O'Connell, Pittsburgh	75	313	39	92	8	32	.294
Adcock, Cincinnati	102	372	48	109	8	54	.293
Murtaugh, Pittsburgh	118	368	35	103	2	35	.293
Mueller, New York	132	525	69	158	7	85	.291
Brown, Brooklyn	48	86	15	25	8	20	.291
Torgeson, Boston	156	575	120	167	23	84	.290
Thompson, New York	148	512	81	143	20	91	.289
Seminick, Philadelphia	130	393	55	113	24	68	.288
Dillingham, Pittsburgh	58	222	23	64	1	9	.288
Westlake, Pittsburgh	139	477	69	136	24	94	.285
Glaviano, St. Louis	115	410	92	117	11	45	.285
Waitkus, Philadelphia	154	641	102	182	2	43	.284
Wyrostek, Cincinnati	131	510	70	145	8	75	.284
Hodges, Brooklyn	154	562	98	159	32	112	.283
Bell, Pittsburgh	111	421	62	119	8	52	.283
Adams, Cincinnati	115	348	57	98	3	25	.282
Campanella, Brooklyn	127	437	67	123	31	90	.281
Slaughter, St. Louis	148	576	81	161	10	99	.280
Howerton, St. Louis	110	314	50	88	10	57	.280

American League (cont.)

INDIVIDUAL BATTING (cont.)

	g	ab	r	h	hr	rbi	avg.
Carrasquel, Chicago.....	141	523	72	148	4	47	.283
Woodling, New York.....	122	449	81	127	6	60	.283
Lollar, St. Louis.....	126	396	55	112	13	63	.283
Fain, Philadelphia.....	150	518	84	146	10	81	.282
Easter, Cleveland.....	154	541	85	152	28	106	.281
Vernon, Cleve.-Wash.....	118	416	55	117	9	26	.281
Guerra, Philadelphia.....	87	253	25	71	2	26	.281
Zernial, Chicago.....	143	543	74	152	29	91	.280
Masi, Chicago.....	122	377	41	105	7	58	.279
Mele, Washington.....	126	434	54	120	12	85	.277
Mize, New York.....	90	274	46	76	25	72	.277
Lenhardt, St. Louis.....	139	479	78	132	27	77	.276
Batts, Boston.....	75	238	28	65	4	33	.273
Harmon, Detroit.....	157	617	104	168	13	74	.272
Hitchcock, Philadelphia.....	73	151	20	41	1	53	.272
Henrich, New York.....	142	527	72	142	8	34	.272
Michaels, Chi.-Wash.....	81	260	23	70	1	23	.269
Boudreau, Cleveland.....	83	219	24	69	8	31	.269
Moss, St. Louis.....	82	127	19	34	2	23	.268
Goldsberry, Chicago.....	71	123	21	33	2	16	.268
Robertson, Washington.....	98	281	43	75	1	29	.267
Arft, St. Louis.....	88	262	46	70	2	19	.267
Moses, Philadelphia.....	81	218	25	58	0	16	.266
Delano, N. Y.-St. L.....	64	84	16	49	6	20	.266
Tipton, Philadelphia.....	118	385	52	102	8	54	.265
Coleman, St. Louis.....	95	277	38	73	4	36	.264
Brown, New York.....	118	380	46	100	4	34	.263
Stewart, Washington.....	143	490	75	128	18	63	.261
Kokos, St. Louis.....	108	327	44	84	6	39	.257
Johnson, New York.....	89	280	26	72	2	26	.257
Wahl, Philadelphia.....	64	138	24	35	0	14	.254
Sommers, St. Louis.....	144	553	93	138	23	95	.249
Suder, Philadelphia.....	76	247	34	61	8	36	.247
Demay, St. Louis.....	61	178	26	44	0	13	.247
Mapes, New York.....	104	327	63	88	12	61	.246
Fox, Chicago.....	130	458	43	111	0	28	.245
Upton, St. Louis.....	124	389	60	95	2	29	.244

PITCHING RECORDS

	g	lp	h	bb	so	w	l	pct.
Ford, New York.....	122	187	50	89	9	7	1	.900
Aloma, Chicago.....	42	88	17	14	17	7	2	.778
Raschi, New York.....	33	257	232	119	156	21	8	.724
Trout, Detroit.....	34	185	189	62	90	13	5	.722
McDermott, Boston.....	38	131	118	114	97	7	3	.700
Lopat, New York.....	35	237	246	64	70	18	8	.692
Wynn, Cleveland.....	32	214	166	98	142	18	8	.692
Hutchinson, Detroit.....	39	232	268	48	72	17	8	.680
Lemon, Cleveland.....	44	288	281	146	172	23	11	.676
Zolack, Cleveland.....	33	64	64	21	15	4	2	.667
Benton, Cleveland.....	35	62	67	30	26	4	2	.667
Farnell, Boston.....	31	249	244	105	94	18	0	.643
Stobbs, Boston.....	32	169	158	87	77	12	7	.632
Byrne, New York.....	31	204	187	160	114	15	9	.625
Houtteman, Detroit.....	41	275	258	99	89	19	12	.613
Hooper, Philadelphia.....	45	170	181	91	58	15	0	.600
Dobson, Boston.....	39	206	276	81	81	15	0	.600
White, Detroit.....	42	112	99	63	51	9	6	.600
Feller, Cleveland.....	35	248	230	103	118	16	11	.593
Gromek, Cleveland.....	31	113	94	35	42	10	7	.588
Gray, Detroit.....	27	149	139	72	101	10	7	.588
Sizemore, St. Louis.....	32	142	147	69	30	7	5	.586
Haynes, Washington.....	37	201	124	44	15	7	5	.593
Reynolds, New York.....	35	239	215	137	161	16	12	.571
Matson, Boston.....	33	129	145	80	60	8	6	.571
Nixon, Boston.....	22	101	123	57	57	8	6	.571
Ferrick, St. L.-N. Y.....	46	81	73	27	25	9	7	.563
Sanford, New York.....	26	113	103	79	54	5	4	.556
Kinder, Boston.....	46	207	213	78	95	14	12	.538
Newhouse, Detroit.....	35	213	233	84	87	15	13	.536
Hudson, Washington.....	30	238	261	98	76	14	14	.500
Garcia, Cleveland.....	23	184	191	74	76	11	11	.500
Johnson, N. Y.-St. L.....	33	144	161	68	66	6	5	.500
Kuzava, Chi.-Wash.....	32	199	198	102	100	10	0	.474
Consuegra, Washington.....	21	125	132	58	38	7	8	.467
Pierce, Chicago.....	33	219	189	137	118	12	16	.429
Overmire, St. Louis.....	31	161	200	45	39	9	12	.429
Cain, Chicago.....	34	172	152	109	75	9	12	.429
Garver, St. Louis.....	37	259	262	107	82	13	18	.419
Scarborough, Wash.-Chi.....	35	208	222	84	94	13	18	.419
Judson, Chicago.....	46	112	104	63	32	2	3	.400
Wyse, Philadelphia.....	41	171	192	84	32	9	14	.391
Wight, Chicago.....	30	207	213	80	72	10	16	.385

CLUB BATTING

	g	r	h	hr	rbi	sb	avg.	was shut out
Boston.....	154	1027	1666	160	966	34	.303	3
New York.....	155	908	1611	159	849	39	.282	3
Detroit.....	157	844	1507	113	785	24	.280	3
Cleveland.....	155	805	1447	163	771	35	.269	6
Chicago.....	156	826	1370	90	580	16	.265	16
Philadelphia.....	154	689	1367	103	613	39	.257	13
Washington.....	155	690	1358	75	648	38	.255	10
St. Louis.....	154	684	1269	105	631	38	.246	7

National League (cont.)

INDIVIDUAL BATTING (cont.)

	g	ab	r	h	hr	rbi	avg.
Dark, New York.....	154	587	79	164	16	68	.279
Hartsfield, Boston.....	107	419	62	116	7	24	.277
Schoendienst, St. Louis.....	153	642	81	177	7	63	.276
Cavarretta, Chicago.....	82	255	49	70	10	30	.275
Sauer, Chicago.....	145	541	85	148	32	102	.274
Northey, Cinc.-Chi.....	80	290	22	62	9	28	.274
Jachroe, Boston.....	141	582	100	159	18	58	.273
Korkow, Chicago.....	85	256	29	70	4	28	.273
Kiner, Pittsburgh.....	150	547	112	149	47	117	.272
Hamner, Philadelphia.....	157	638	78	172	10	80	.270
Jones, Philadelphia.....	157	610	100	162	25	83	.266
Ramazzotti, Chicago.....	61	145	19	38	1	7	.262
Hatton, Cincinnati.....	130	435	67	113	11	54	.260
Reese, Brooklyn.....	142	532	97	138	11	53	.259
Usher, Cincinnati.....	105	320	51	83	6	34	.259
Merriman, Cincinnati.....	92	298	44	77	2	29	.259
Litwiler, Cincinnati.....	54	112	15	29	6	12	.259
Rojek, Pittsburgh.....	77	229	28	59	0	16	.258
Fernandez, Pittsburgh.....	65	198	22	51	6	27	.258
Cox, Brooklyn.....	119	451	62	116	4	42	.255
Kazak, St. Louis.....	93	207	21	53	5	23	.256
Mueller, N. Y.-Pitts.....	71	168	17	43	6	24	.256
Castiglione, Pittsburgh.....	96	263	30	67	3	21	.255
McCullough, Pittsburgh.....	102	279	28	71	6	34	.254
Ward, Chicago.....	80	285	31	72	6	34	.253
Thomson, New York.....	149	563	78	142	25	85	.252
Stallcup, Cincinnati.....	136	482	44	121	8	63	.251
Ryan, Boston-Cinc.....	125	434	60	109	6	47	.251
Diering, St. Louis.....	87	204	34	51	3	18	.250
Whitman, Philadelphia.....	75	132	21	33	0	12	.250
Miksis, Brooklyn.....	50	76	13	19	2	10	.250
Marion, St. Louis.....	106	371	36	92	4	40	.248
Schenz, Pittsburgh.....	56	97	15	24	1	4	.247
D. Rice, St. Louis.....	129	421	38	100	9	52	.243
Owen, Chicago.....	86	259	22	63	2	20	.243
Nelson, St. Louis.....	76	235	27	57	1	20	.243
Twilling, Chicago.....	133	480	62	115	10	32	.240
Serona, Chicago.....	127	436	57	104	17	61	.239

PITCHING RECORDS

	g	lp	h	bb	so	w	l	pct.
Leonard, Chicago.....	35	74	70	28	28	5	1	.833
Maglie, New York.....	47	206	169	85	90	18	4	.818
Johnson, St. L.-Phila.....	16	53	61	46	32	4	1	.800
Hearn, St. L.-New York.....	22	134	85	42	19	11	7	.706
Hiller, Chicago.....	38	153	149	32	51	12	6	.673
Konstanty, Phila.....	74	151	109	51	54	16	7	.696
Bankhead, Brooklyn.....	41	129	118	88	95	9	4	.692
Simmons, Phila.....	31	215	178	87	146	17	8	.680
Martin, St. Louis.....	30	63	81	29	19	4	2	.667
Erautt, Cincinnati.....	33	65	82	22	32	4	2	.667
Miller, Philadelphia.....	35	174	190	57	46	11	6	.647
Roberts, Philadelphia.....	40	304	283	76	146	20	11	.645
Newcombe, Brooklyn.....	40	267	255	64	134	19	11	.633
Roe, Brooklyn.....	36	251	245	69	117	19	11	.633
Palica, Brooklyn.....	42	201	176	95	124	13	8	.619
Sain, Boston.....	37	278	294	70	95	20	13	.606
Jansen, New York.....	40	275	238	55	160	19	13	.594
Fox, Cincinnati.....	34	187	195	85	63	11	8	.579
Bickford, Boston.....	40	311	293	122	126	19	14	.576
Church, Philadelphia.....	31	142	113	56	61	8	6	.571
Roy, Boston.....	19	60	72	39	25	4	3	.571
Kennedy, New York.....	36	115	118	52	38	6	4	.556
Podbielan, Brooklyn.....	20	73	93	29	28	5	4	.556
Spahn, Boston.....	41	293	254	110	121	21	17	.553
Brazle, St. Louis.....	46	165	187	81	46	11	9	.550
Lanier, St. Louis.....	27	181	173	68	90	11	9	.550
Erskine, Brooklyn.....	22	103	109	35	49	7	6	.538
Blackwell, Cincinnati.....	40	261	203	111	189	17	15	.531
Pollet, St. Louis.....	37	232	229	69	116	14	13	.519
Staley, St. Louis.....	42	170	194	62	60	13	13	.500
Boyer, St. Louis.....	35	120	105	49	81	7	7	.500
Chipman, Boston.....	27	124	118	37	40	7	7	.500
Banta, Brooklyn.....	16	41	39	15	15	4	4	.500
Hartung, New York.....	20	65	85	44	22	3	3	.500
Munger, St. Louis.....	32	167	156	69	62	7	8	.467
Koslo, New York.....	40	187	190	68	53	13	15	.464
Lade, Chicago.....	34	118	126	50	29	5	6	.465
Meyer, Philadelphia.....	33	161	193	66	74	9	11	.460
Jones, New York.....	40	199	188	68	53	13	14	.464
Chapman, Pittsburgh.....	37	249	262	92	92	12	15	.444
MacDonald, Pittsburgh.....	32	163	139	88	59	8	10	.444
Branca, Brooklyn.....	43	143	152	54	98	7	9	.433
Law, Pittsburgh.....	27	128	137	49	57	7	9	.433

National League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1876	Chicago	Albert G. Spalding	52	14	.788	1914*	Boston	George T. Stallings	94	59	.614
1877	Boston	Harry Wright	31	17	.646	1915	Philadelphia	Patrick J. Moran	90	62	.592
1878	Boston	Harry Wright	41	19	.683	1916	Brooklyn	Wilbert Robinson	94	60	.610
1879	Providence	George Wright	59	25	.702	1917	New York	John J. McGraw	98	56	.636
1880	Chicago	Adrian C. Anson	67	17	.798	1918	Chicago	Fred L. Mitchell	84	45	.651
1881	Chicago	Adrian C. Anson	56	28	.667	1919*	Cincinnati	Patrick J. Moran	96	44	.686
1882	Chicago	Adrian C. Anson	55	29	.655	1920	Brooklyn	Wilbert Robinson	93	61	.604
1883	Boston	John F. Morrill	63	35	.643	1921*	New York	John J. McGraw	94	59	.614
1884	Providence	Frank C. Bancroft	84	28	.750	1922*	New York	John J. McGraw	93	61	.604
1885	Chicago	Adrian C. Anson	87	25	.777	1923	New York	John J. McGraw	95	58	.621
1886	Chicago	Adrian C. Anson	90	34	.726	1924	New York	John J. McGraw	93	60	.608
1887	Detroit	W. H. Watkins	79	45	.637	1925*	Pittsburgh	William B. McKechnie	95	58	.621
1888	New York	James J. Mutrie	84	47	.641	1926*	St. Louis	Rogers Hornsby	89	65	.578
1889	New York	James J. Mutrie	83	43	.659	1927	Pittsburgh	Owen J. Bush	94	60	.610
1890	Brooklyn	William H. McGunnigle	86	43	.667	1928	St. Louis	William B. McKechnie	95	59	.617
1891	Boston	Frank G. Selee	87	51	.630	1929	Chicago	Joseph V. McCarthy	98	54	.645
1892	Boston	Frank G. Selee	102	48	.680	1930	St. Louis	Charles E. Street	92	62	.597
1893	Boston	Frank G. Selee	86	43	.667	1931*	St. Louis	Charles E. Street	101	53	.656
1894	Baltimore	Edward H. Hanlon	89	39	.695	1932	Chicago	Charles J. Grimm	90	64	.584
1895	Baltimore	Edward H. Hanlon	87	43	.669	1933*	New York	William H. Terry	91	61	.599
1896	Baltimore	Edward H. Hanlon	90	39	.698	1934*	St. Louis	Frank F. Frisch	95	58	.621
1897	Boston	Frank G. Selee	93	39	.705	1935	Chicago	Charles J. Grimm	100	54	.649
1898	Boston	Frank G. Selee	102	47	.685	1936	New York	William H. Terry	92	62	.597
1899	Brooklyn	Edward H. Hanlon	88	42	.677	1937	New York	William H. Terry	95	57	.625
1900	Brooklyn	Edward H. Hanlon	82	54	.603	1938	Chicago	Charles L. Hartnett	89	63	.586
1901	Pittsburgh	Fred C. Clarke	90	49	.647	1939	Cincinnati	William B. McKechnie	97	57	.630
1902	Pittsburgh	Fred C. Clarke	103	36	.741	1940*	Cincinnati	William B. McKechnie	100	53	.654
1903	Pittsburgh	Fred C. Clarke	91	49	.650	1941	Brooklyn	Leo E. Durocher	100	54	.649
1904	New York	John J. McGraw	106	47	.693	1942*	St. Louis	William H. Southworth	106	48	.688
1905*	New York	John J. McGraw	105	48	.686	1943	St. Louis	William H. Southworth	105	49	.682
1906	Chicago	Frank L. Chance	116	36	.763	1944*	St. Louis	William H. Southworth	105	49	.682
1907*	Chicago	Frank L. Chance	107	45	.704	1945	Chicago	Charles J. Grimm	98	56	.636
1908*	Chicago	Frank L. Chance	99	55	.643	1946*	St. Louis	Edwin H. Dyer	98	58	.628
1909*	Pittsburgh	Fred C. Clarke	110	42	.724	1947	Brooklyn	Burton E. Shotton	94	60	.610
1910	Chicago	Frank L. Chance	104	50	.675	1948	Boston	William H. Southworth	91	62	.595
1911	New York	John J. McGraw	99	54	.647	1949	Brooklyn	Burton E. Shotton	97	57	.630
1912	New York	John J. McGraw	103	48	.682	1950	Philadelphia	Edwin M. Sawyer	91	63	.591
1913	New York	John J. McGraw	101	51	.664						

* World Series winner.

American League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1901	Chicago	Clark C. Griffith	83	53	.610	1926	New York	Miller J. Huggins	91	63	.591
1902	Philadelphia	Connie Mack	83	53	.610	1927*	New York	Miller J. Huggins	110	44	.714
1903*	Boston	James J. Collins	91	47	.659	1928*	New York	Miller J. Huggins	101	53	.656
1904	Boston	James J. Collins	95	59	.617	1929*	Philadelphia	Connie Mack	104	46	.693
1905	Philadelphia	Connie Mack	92	56	.622	1930*	Philadelphia	Connie Mack	102	52	.662
1906*	Chicago	Fielder A. Jones	93	58	.616	1931	Philadelphia	Connie Mack	107	45	.704
1907	Detroit	Hugh A. Jennings	92	58	.613	1932*	New York	Joseph V. McCarthy	107	47	.695
1908	Detroit	Hugh A. Jennings	90	63	.588	1933	Washington	Joseph E. Cronin	99	53	.651
1909	Detroit	Hugh A. Jennings	98	54	.645	1934	Detroit	Gordon S. Cochrane	101	53	.656
1910*	Philadelphia	Connie Mack	102	48	.680	1935*	Detroit	Gordon S. Cochrane	93	58	.616
1911*	Philadelphia	Connie Mack	101	50	.669	1936*	New York	Joseph V. McCarthy	102	51	.667
1912*	Boston	J. Garland Stahl	105	47	.691	1937*	New York	Joseph V. McCarthy	102	52	.662
1913*	Philadelphia	Connie Mack	96	57	.627	1938*	New York	Joseph V. McCarthy	99	53	.651
1914	Philadelphia	Connie Mack	99	53	.651	1938*	New York	Joseph V. McCarthy	106	45	.702
1915*	Boston	William F. Carrigan	101	50	.669	1940	Detroit	Delmar D. Baker	90	54	.584
1916*	Boston	William F. Carrigan	91	63	.591	1941*	New York	Joseph V. McCarthy	101	53	.656
1917*	Chicago	Clarence H. Rowland	100	54	.649	1942	New York	Joseph V. McCarthy	103	51	.669
1918*	Boston	Edward G. Barrow	75	51	.595	1943*	New York	Joseph V. McCarthy	98	56	.636
1919	Chicago	William Gleason	88	52	.629	1944	St. Louis	James L. Sewell	89	65	.578
1920*	Cleveland	Tris E. Speaker	98	56	.636	1945*	Detroit	Stephen F. O'Neill	88	65	.575
1921	New York	Miller J. Huggins	98	55	.641	1946	Boston	Joseph E. Cronin	104	50	.675
1922	New York	Miller J. Huggins	94	60	.610	1947*	New York	Stanley R. Harris	97	57	.630
1923*	New York	Miller J. Huggins	98	54	.645	1948*	Cleveland	Louis Boudreau	97	58	.626
1924*	Washington	Stanley R. Harris	92	62	.597	1949*	New York	Charles D. Stengel	97	57	.630
1925	Washington	Stanley R. Harris	96	55	.635	1950*	New York	Charles D. Stengel	98	56	.636

* World Series winner.

National League Batting Champions

(Based on minimum of 100 games played.)

Year	Avg.	Year	Avg.	Year	Avg.
1876—R. Barnes, Chi.....	403	1901—J. Burkett, St. L.....	382	1926—Eugene Hargrave, Cin.....	353
1877—J. L. White, Bos.....	385	1902—C. H. Beaumont, Pitts.....	357	1927—Paul G. Waner, Pitts.....	330
1878—A. Dalrymple, Mil.....	356	1903—J. P. Wagner, Pitts.....	355	1928—Rogers Hornsby, Bos.....	387
1879—A. C. Anson, Chi.....	407	1904—J. P. Wagner, Pitts.....	349	1929—Frank J. O'Doul, Phila.....	398
1880—G. F. Gore, Chi.....	365	1905—J. B. Seymour, Cin.....	377	1930—Wm. H. Terry, N. Y.....	401
1881—A. C. Anson, Chi.....	399	1906—J. P. Wagner, Pitts.....	339	1931—C. J. Hafey, St. L.....	349
1882—D. Brouthers, Buf.....	367	1907—J. P. Wagner, Pitts.....	350	1932—F. J. O'Doul, Bklyn.....	368
1883—D. Brouthers, Buf.....	371	1908—J. P. Wagner, Pitts.....	354	1933—C. H. Klein, Phila.....	368
1884—J. O'Rourke, Buf.....	350	1909—J. P. Wagner, Pitts.....	339	1934—P. G. Waner, Pitts.....	362
1885—R. Connor, N. Y.....	371	1910—S. N. Magee, Phila.....	331	1935—F. Vaughan, Pitts.....	355
1886—M. J. Kelly, Chi.....	388	1911—J. P. Wagner, Pitts.....	334	1936—P. G. Waner, Pitts.....	373
1887—A. C. Anson, Chi.....	421	1912—H. Zimmerman, Chi.....	372	1937—J. M. Lombard, St. L.....	374
1888—A. C. Anson, Chi.....	343	1913—J. Daubert, Bklyn.....	350	1938—E. N. Lombardi, Cin.....	342
1889—D. Brouthers, Bos.....	373	1914—J. Daubert, Bklyn.....	329	1939—J. R. Mize, St. L.....	349
1890—J. Glasscock, N. Y.....	336	1915—L. Doyle, St. L.....	320	1940—D. Garms, Pitts.....	355
1891—W. Hamilton, Phila.....	338	1916—H. Chase, Cin.....	339	1941—H. P. Reiser, Bklyn.....	343
1892—C. Childs, Cleve.....	335	1917—E. J. Roush, Cin.....	341	1942—E. N. Lombardi, Bos.....	330
1892—D. Brouthers, Bklyn.....	335	1918—Z. D. Wheat, Bklyn.....	335	1943—S. F. Musial, St. L.....	357
1893—Hugh Duffy, Bos.....	378	1919—E. J. Roush, Cin.....	321	1944—F. Walker, Bklyn.....	357
1894—Hugh Duffy, Bos.....	438	1920—Rogers Hornsby, St. L.....	370	1945—P. J. Cavarretta, Chicago.....	355
1895—J. Burkett, Cleve.....	423	1921—Rogers Hornsby, St. L.....	397	1946—S. F. Musial, St. L.....	365
1896—J. Burkett, Cleve.....	410	1922—Rogers Hornsby, St. L.....	401	1947—H. W. Walker, Phila.....	353
1897—W. Keeler, Balt.....	432	1923—Rogers Hornsby, St. L.....	384	1948—S. F. Musial, St. L.....	376
1898—W. Keeler, Balt.....	379	1924—Rogers Hornsby, St. L.....	424	1949—J. R. Robinson, Bklyn.....	342
1899—E. J. Delahanty, Phila.....	408	1925—Rogers Hornsby, St. L.....	403	1950—S. F. Musial, St. L.....	346
1900—J. P. Wagner, Pitts.....	380				

American League Batting Champions

(Based on minimum of 100 games played.)

Year	Avg.	Year	Avg.	Year	Avg.
1901—N. Lajoie, Phila.....	405	1918—T. R. Cobb, Det.....	382	1935—C. S. Myer, Wash.....	349
1902—E. J. Delahanty, Wash.....	376	1919—T. R. Cobb, Det.....	384	1936—L. B. Appling, Chi.....	388
1903—N. Lajoie, Cleve.....	355	1920—G. H. Sisler, St. L.....	407	1937—C. L. Gehring, Det.....	371
1904—N. Lajoie, Cleve.....	381	1921—H. E. Heilmann, Det.....	394	1938—J. E. Fox, Bos.....	349
1905—Elmer Flick, Cleve.....	306	1922—G. H. Sisler, St. L.....	420	1939—J. P. DiMaggio, N. Y.....	381
1906—G. Stone, St. L.....	358	1923—H. E. Heilmann, Det.....	403	1940—J. P. DiMaggio, N. Y.....	352
1907—T. R. Cobb, Det.....	350	1924—G. H. Ruth, N. Y.....	378	1941—T. S. Williams, Bos.....	406
1908—T. R. Cobb, Det.....	324	1925—H. E. Heilmann, Det.....	393	1942—T. S. Williams, Bos.....	356
1909—T. R. Cobb, Det.....	377	1926—H. E. Manush, Det.....	378	1943—L. B. Appling, Chi.....	328
1910—T. R. Cobb, Det.....	385	1927—H. E. Heilmann, Det.....	398	1944—L. Boudreau, Cleve.....	327
1911—T. R. Cobb, Det.....	420	1928—L. A. Goslin, Wash.....	379	1945—G. H. Stirnweiss, N. Y.....	309
1912—T. R. Cobb, Det.....	410	1929—L. A. Fonseca, Cleve.....	369	1946—J. B. Vernon, Wash.....	353
1913—T. R. Cobb, Det.....	390	1930—A. H. Simmons, Phila.....	381	1947—T. S. Williams, Bos.....	343
1914—T. R. Cobb, Det.....	368	1931—A. H. Simmons, Phila.....	390	1948—T. S. Williams, Bos.....	369
1915—T. R. Cobb, Det.....	369	1932—D. Alexander, Det.-Bos.....	367	1949—G. C. Kell, Det.....	343
1916—T. Speaker, Cleve.....	386	1933—J. E. Fox, Phila.....	356	1950—W. D. Goodman, Bos.....	354
1917—T. R. Cobb, Det.....	383	1934—H. L. Gehrig, N. Y.....	363		

National Baseball Congress Champions

Source: Ray Dumont, Wichita, Kansas.

1935—Bismarck (N. D.)	Corwin-Churchill
1936—Duncan (Okla.)	Halliburtons
1937—Enid (Okla.)	Eason Oilers
1938—Buford (Ga.)	Bona Allens
1939—Duncan (Okla.)	Halliburtons
1940—Enid (Okla.)	Champlins
1941—Enid (Okla.)	Champlins
1942—Wichita (Kans.)	Boeing Bombers
1943—Camp Wheeler (Ga.)	Spokes
1944—Sherman Field (Kans.)	Flyers
1945—Enid (Okla.)	Army Air Field
1946—St. Joseph (Mich.)	Autos
1947—Ft. Wayne (Ind.)	General Electrics
1948—Ft. Wayne (Ind.)	General Electrics
1949—Ft. Wayne (Ind.)	General Electrics
1950—Ft. Wayne (Ind.)	Capcharts

DiMAGGIO'S SALARY RECORD

Year	Estimated salary	World series
1936.....	\$ 7,500	\$6,430.55*
1937.....	15,000	6,471.10*
1938.....	25,000	5,782.76*
1939.....	27,500	5,614.26*
1940.....	32,000	546.59†
1941.....	37,500	5,943.31*
1942.....	43,750	3,018.77†
1946.....	43,750	392.95†
1947.....	43,750	5,830.03*
1948.....	70,000	778.88†
1949.....	100,000	5,884.21*
1950.....	100,000	5,737.95*

Totals 545,750 52,431.36

* Winning player's share. † Club finished third.
‡ Losing player's share.

Major League Individual All-Time Records

Highest batting average, season—Hugh Duffy, Boston (N), 1894	438	Most 2-base hits—Tris E. Speaker, Boston, Cleveland, Washington, Philadelphia (A), 1907-28	793
Highest batting average (10 or more years)—Ty Cobb, Detroit and Philadelphia (A), 1905-28	367	Most 2-base hits, season—Earl W. Webb, Boston (A), 1931	67
Most years batting over .300—Ty Cobb	23	Most singles—Ty Cobb	3,052
Most hits—Ty Cobb	4,191	Most singles, season (modern record)—Lloyd Waner, Pittsburgh (N), 1927-198	198
Most hits, season—George Sisler, St. Louis (A), 1920	257	Most runs—Ty Cobb	2,244
Most consecutive hits, game—Wilbert Robinson, Baltimore (N), 1892	7	Most runs batted in—Babe Ruth	2,209
Most hits in succession—Frank Higgins, Boston (A), 1938	12	Most runs batted in, season—Hack Wilson, Chicago (N), 1930	190
Most consecutive games batted safely—Joe DiMaggio, New York (A), May 15 to July 16, 1941, inclusive	56	Most runs batted in, single game—James L. Bottomley, St. Louis (N) vs. Brooklyn, Sept. 16, 1924	12
Most long hits—Babe Ruth, Boston and New York (A), Boston (N), 1914-35 (506 2b, 136 3b, 714 home runs)	1,356	Most games played—Ty Cobb	3,033
Most total bases—Ty Cobb	5,863	Most consecutive games played—Lou Gehrig, New York (A). Streak started June 1, 1925, and stopped May 2, 1939	2,130
Most total bases, season—Babe Ruth, New York (A), 1921	457	Longest service as player—Eddie Collins, Philadelphia and Chicago (A), 1906-30; Bobby Wallace, Cleveland (N) and St. Louis (A), 1894-1918	25 years
Most total bases, game—Bobby Lowe, Boston (N), 1894; Ed Delahanty, Philadelphia (N), 1896; Gil Hodges, Brooklyn, 1950	17	Most times at bat—Ty Cobb	11,429
Most home runs—Babe Ruth	714	Most bases on balls—Babe Ruth	2,056
Most home runs, season—Babe Ruth, New York (A), 1927	60	Most bases on balls, season—Babe Ruth, 1923	170
Most home runs, 1 game—Lowe, Boston (N), 1894; Delahanty, Phila. (N), 1896; Gehrig, N. Y. (A), 1932; Klein, Phila. (N), 1936 (10 innings); Seerey, Chicago (A), 1948 (11 innings); Hodges, Brooklyn, 1950	4	Most bases on balls, game (modern record)—Jimmy Foxx Boston (A), 1938	6
Most 3-base hits—Sam Crawford, Cincinnati (N), 1899-1902; Detroit (A), 1903-17	312	Most stolen bases—Ty Cobb	892
Most 3-base hits, season—J. Owen Wilson, Pittsburgh (N), 1912	36	Most stolen bases, season (modern record)—Ty Cobb, Detroit (A), 1915	96

Fewest strikeouts, season (150 or more games)—Joe Sewell, Cleveland (A), 1925, 1929	4
Most consecutive years manager, one club—Connie Mack, Phila. (A), 1901-50	50

PITCHING

Most games—Cy Young (516 in National League, 390 in American League), 1890-1911	906	Most games won, season (modern record)—Jack Chesbro, New York (A), 1904	41
Most games won—Cy Young, Cleveland (N), 1890-98; St. Louis (N), 1899-1900; Boston (A), 1901-08; Cleveland (A), 1909-11 (part); Boston (N), 1911 (part)	511	Most consecutive games won, season—Tim Keefe, New York (N), 1888; Rube Marquard, New York (N), 1912	19
Most complete games, season—Jack Chesbro, New York (A), 1904	48	Most shutout games—Walter Johnson, Washington (A), 1907-27	113
Most games, season (modern record)—Jim Konstanty, Philadelphia (N)	74	Most shutout games, season—Grover Alexander, Philadelphia (N), 1916	16
Most innings, season—Ed Walsh, Chicago (A), 1908	464	Most consecutive shutout innings—Walter Johnson, 1913	56
Lowest earned-run average, season—Ferdie Schupp, New York (N), 1916	0.90	Most strikeouts—Walter Johnson	3,497
Fewest hits in two consecutive games—John Vander Meer, Cincinnati (N), 1938 (both no-hit games)	0	Most strikeouts, season (modern record)—Bobby Feller, Cleveland (A), 1946	343
		Most strikeouts in 9 innings (1901 to date)—Bobby Feller, Cleveland (A) vs. Detroit, Oct. 2, 1938	18

RECORD OF MAJOR LEAGUE ALL-STAR GAMES

Date	Winning league and pitcher		Losing league and pitcher		Where held	Paid	
		Runs		Runs		attendance	Receipts
July 6, 1933	American (Gomez).....	4	National (Hallahan).....	2	Chicago (A).....	49,200	\$ 51,293.50*
July 10, 1934	American (Harder).....	9	National (Mungo).....	7	New York (N).....	48,363	52,982.00
July 8, 1935	American (Gomez).....	4	National (Walker).....	1	Cleveland (A).....	69,812	82,179.12
July 7, 1936	National (J. Dean).....	4	American (Grove).....	3	Boston (N).....	25,556	24,588.80
July 7, 1937	American (Gomez).....	8	National (J. Dean).....	3	Washington (A).....	31,391	28,475.18
July 6, 1938	National (Vander Meer).....	4	American (Gomez).....	1	Cincinnati (N).....	27,067	38,469.05
July 11, 1939	American (Bridges).....	3	National (Lee).....	1	New York (A).....	62,892	75,701.00
July 9, 1940	National (Derringer).....	4	American (Ruffing).....	0	St. Louis (N).....	32,373	36,723.03
July 8, 1941	American (Smith).....	7	National (Passeau).....	5	Detroit (A).....	54,674	63,267.08
July 6, 1942	American (Chandler).....	3	National (M. Cooper).....	1	New York (N).....	33,694	86,102.98†
July 13, 1943	American (Leonard).....	5	National (M. Cooper).....	3	Philadelphia (A).....	31,938	65,674.00†
July 11, 1944	National (Raffensberger)....	7	American (Hughson).....	1	Pittsburgh (N).....	29,589	81,275.00
1945—No game.							
July 9, 1946	American (Feller).....	12	National (Passeau).....	0	Boston (A).....	34,906	89,071.00
July 8, 1947	American (Shea).....	2	National (Sain).....	1	Chicago (N).....	41,123	105,314.90
July 13, 1948	American (Raschi).....	5	National (Schmitz).....	2	St. Louis (A).....	34,009	93,447.07
July 12, 1949	American (Trucks).....	11	National (Newcombe).....	7	Brooklyn (N).....	32,557	79,225.02

* An additional \$5,175 was received for radio rights. † Additional funds were received from other sources.

BOX SCORE OF 1950 ALL-STAR GAME

At Comiskey Park, Chicago, July 11

NATIONAL LEAGUE

AMERICAN LEAGUE

	bats	ab.	r.	h.	po.	a.	e.		bats	ab.	r.	h.	po.	a.	e.
Jones, Philadelphia, 3b.....	R	7	0	1	2	3	0	Rizzuto, New York, ss.....	R	6	0	2	2	2	0
Kliner, Pittsburgh, if.....	R	6	1	2	1	0	0	Doby, Cleveland, cf.....	L	6	1	2	9	0	0
Musial, St. Louis, 1b.....	L	5	0	0	13	1	0	Kell, Detroit, 3b.....	R	6	0	0	2	4	0
Robinson, Brooklyn, 2b.....	R	4	1	1	3	2	0	Williams, Boston, if.....	L	4	0	1	1	0	0
Wyrostek, Cincinnati, rf.....	L	2	0	0	0	0	0	D. DiMaggio, Boston, if.....	L	2	0	0	1	2	0
Slaughter, St. Louis, cf-rf.....	L	4	1	2	3	0	0	Dropo, Boston, 1b.....	R	3	0	1	8	1	0
Schoendienst, St. Louis, 2b L-R	L	1	1	1	1	1	0	Fain, Philadelphia, 1b.....	L	3	0	1	2	1	0
Sauer, Chicago, rf.....	R	2	0	0	1	0	0	Evers, Detroit, rf.....	R	2	0	0	1	0	0
Pafko, Chicago, cf.....	R	4	0	2	4	0	0	J. DiMaggio, New York, rf.....	R	3	0	0	3	0	0
Campanella, Brooklyn, c.....	R	6	0	0	13	2	0	Berra, New York, c.....	L	2	0	0	2	0	0
Marion, St. Louis, ss.....	R	2	0	0	0	2	0	Hegan, Cleveland, c.....	R	3	0	0	7	1	0
Konstanty, Philadelphia, p.....	R	0	0	0	0	0	0	Doerr, Boston, 2b.....	R	3	0	0	1	4	0
Jansen, New York, p.....	R	2	0	0	1	0	0	Coleman, New York, 2b.....	R	2	0	0	0	0	1
d Snider, Brooklyn.....	L	1	0	0	0	0	0	Raschi, New York, p.....	R	0	0	0	0	0	0
Blackwell, Cincinnati, p.....	R	1	0	0	0	1	0	a Michaels, Washington.....	R	1	1	1	0	0	0
Roberts, Philadelphia, p.....	L	1	0	0	0	0	0	Lemon, Cleveland, p.....	L	0	1	0	1	0	0
Newcombe, Brooklyn, p.....	L	0	0	0	0	1	0	Houtteman, Detroit, p.....	L	1	0	0	1	0	0
b Sisler, Philadelphia.....	L	1	0	1	0	0	0	Reynolds, New York, p.....	R	1	0	0	0	0	0
c Reese, Brooklyn, ss.....	R	3	0	0	2	4	0	e Henrich, New York.....	L	1	0	0	0	0	0
								Gray, Detroit, p.....	L	0	0	0	0	0	0
Totals.....		52	4	10	42	17	0	Feller, Cleveland, p.....	R	0	0	0	0	0	0
								Totals.....		49	3	8	42	13	1

a Doubled for Raschi in third. b Singled for Newcombe in sixth. c Ran for Sisler in sixth. d Filled out for Jansen in twelfth. e Filled out for Reynolds in twelfth.

National League.....	0	2	0	0	0	0	0	0	1	0	0	0	0	1	—4
American League.....	0	0	1	0	2	0	0	0	0	0	0	0	0	0	—3

Runs batted in—Slaughter, Sauer, Kell 2, Williams, Kliner, Schoendienst. Two-base hits—Michaels, Doby, Kliner. Three-base hits—Slaughter, Dropo. Home runs—Kliner, Schoendienst. Double plays—Rizzuto, Doerr and Dropo; Jones, Schoendienst and Musial. Left on bases—National League 9, American League 6. Bases on balls—Off Roberts 1 (Evers), Newcombe 1 (Lemon), Houtteman 1 (Slaughter), Reynolds 1 (Musial), Feller 1 (Reese). Struck out—By Raschi 1 (Roberts), Roberts 1 (Doby), Lemon 2 (Campanella, Kliner), Newcombe 1 (Rizzuto), Konstanty 2 (Evers, Hegan), Jansen 6 (Houtteman, Doby, Kell, Williams, Hegan, Coleman), Reynolds 2 (Jansen, Reese), Blackwell 2 (Hegan, Coleman), Gray 1 (Campanella), Feller 1 (Blackwell).

Hits—Off Raschi 2 in 3 innings, Roberts 3 in 3, Newcombe 3 in 2, Lemon 1 in 3, Konstanty 0 in 1, Houtteman 3 in 3, Jansen 1 in 5, Reynolds 1 in 3, Gray 3 in 1 1/3, Feller 0 in 2/3, Blackwell 1 in 3. Wild pitch—Roberts. Passed ball—Hegan. Winning pitcher—Blackwell. Losing pitcher—Gray.

Umpires—McGowan (A), Pinehl (N), Rommel (A), Conlan (N), Stevens (A), Robb (N). Time—3:19. Attendance—46,127 (paid). Receipts—\$126,179.51

Red Sox Set Records

Exceptional baseball records fell as the Red Sox crushed the St. Louis Browns, 29-4, at Boston on June 8, 1950. The records:

Most runs in one game (modern record), 29

*Most total bases in one game, 60

Most runs in two games, 49

Most hits in two games, 51

* Home runs—Doerr 3, Williams 2, Dropo 2. Three-base hit—Stephens. Two-base hits—Zarilla 4. Batts, Stephens. Total number of hits for Red Sox—28.

Bickford Hurls No-Hitter

Vern Bickford, Boston Braves' right-hander, pitched the only no-hitter in the major leagues in 1950. His victims were the Brooklyn Dodgers in a night game at Boston on Aug. 11. Bickford walked four men in turning in a 7-0 victory.

In 1950 the 57 minor leagues in organized baseball drew a total attendance of 35,566,243, with paid admissions amounting to 32,910,377.

BASEBALL'S HALL OF FAME

Cooperstown, N. Y.

Lifetime Records of Immortals

Year elected	Name and playing years	Games	Batting Average	Year elected	Name and playing years	Games	Batting Average
1939	Anson, Adrian C., 1876-97.....	2253	.339	1936	Ruth, G. H. (Babe), 1914-35.....	2503	.342
1945	Bresnahan, Roger, 1897-1915.....	1410	.279	1937	Speaker, T. E., 1907-28.....	2789	.344
1945	Brouthers, Dan, 1879-96.....	1653	.348	1939	Sisler, George H., 1915-30.....	2055	.340
1946	Burkett, Jesse C., 1890-1905.....	2063	.342	1946	Tinker, Joseph B., 1902-16.....	1641	.264
1946	Chance, Frank L., 1898-1914.....	1232	.297	1948	Traynor, Harold J., 1920-37.....	1941	.320
1945	Clarke, Fred C., 1894-1915.....	2204	.315	1936	Wagner, John P., 1897-1917.....	2785	.329
1936	Cobb, Tyrus R., 1905-28.....	3033	.367	1937	Wright, George, 1876-82.....	315	.251
1947	Cochrane, Gordon S., 1925-37.....	1482	.320				
1939	Collins, Edward T., 1906-30.....	2826	.333				
1945	Collins, James J., 1895-1908.....	1718	.294				
1939	Comiskey, C. A., 1882-94.....	1383	.269				
1945	Delahanty, E. J., 1888-1903.....	1825	.346				
1945	Duffy, Hugh, 1888-1906.....	1722	.330				
1946	Evers, John J., 1902-19.....	1776	.270				
1939	Ewing, Wm. B., 1880-97.....	1280	.311				
1947	Frisch, Frank F., 1919-37.....	2311	.316				
1939	Gehrig, H. Louis, 1923-39.....	2164	.340				
1949	Gehringer, Charles L., 1924-42.....	2323	.321				
1942	Hornsby, Rogers, 1915-37.....	2259	.358				
1945	Jennings, H. A., 1891-1908.....	1264	.314				
1939	Keeler, Wm. H., 1892-1910.....	2124	.345				
1945	Kelly, Michael J., 1878-93.....	1493	.315				
1937	Lajoie, Napoleon, 1896-1916.....	2475	.338				
1946	McCarthy, Thomas, 1884-96.....	1268	.294				
1937	McGraw, John J., 1891-1906.....	1082	.334				
1937	Mack, Connie, 1886-96.....	736	.249				
1945	O'Rourke, James, 1876-94.....	1750	.315				
1945	Robinson, Wilbert, 1886-1902.....	1316	.280				

PITCHERS

Year elected	Name and playing years	Won	Lost
1938	Alexander, Grover C., 1911-30....	373	208
1949	Brown, Mordecai, 1903-16.....	239	131
1946	Chesbro, John D., 1899-1909.....	199	128
1946	Griffith, Clark C., 1891-1908.....	237	140
1947	Grove, Robert M., 1925-41.....	300	141
1947	Hubbell, Carl O., 1928-43.....	253	154
1936	Johnson, Walter P., 1907-27.....	414	276
1946	McGinnity, Joseph J., 1899-1908.....	248	141
1936	Mathewson, Christopher, 1900-16.....	373	188
1949	Nichols, Charles A., 1890-1906....	360	202
1948	Pennock, Herbert J., 1912-34.....	239	161
1946	Plank, Edward S., 1901-17.....	324	190
1939	Radbourne, Charles G., 1880-91.....	308	191
1946	Waddell, George E., 1897-1910....	203	143
1946	Walsh, Edward A., 1904-17.....	195	126
1937	Young, Denton T., 1890-1911.....	511	315

SELECTED FOR MERITORIOUS SERVICE

Morgan G. Bulkeley (1937), Alexander J. Cartwright (1938), Henry Chadwick (1938), William A. Cummings (1939), B. Bancroft Johnson (1937), Judge Kenesaw M. Landis (1944), Albert G. Spalding (1939).

HONOR ROLLS

(All named in 1946)

EXECUTIVES—E. S. Barnard, Edward G. Barrow, John Bruce, John T. Brush, Barney Dreyfuss, Charles Ebbets, August Herrmann, John A. Heydler, J. A. (Bob) Quinn, Arthur H. Soden, Nicholas Young.

MANAGERS—William Carrigan, Edward Hanlon, Miller J. Huggins, Frank G. Selee, John M. Ward.

UMPIRES—Thomas Connelly, William Dinneen, Robert Emslie, William Evans, John Gaffney, Timothy Hurst, Honest John Kelly, William Klem, Thomas Lynch, Silk O'Loughlin, Jack Sheridan.

WRITERS—Walter Barnes, Harry E. Cross, William Hanna, Frank Hough, Sid Mercer, T. H. Murnane, Frank Richter, Cy Sanborn, John B. Sheridan, William Slocum, George Tidden, Joe Vila.

BABE RUTH'S MAJOR LEAGUE HOME-RUN RECORD

(A) American League; (N) National League

Regular Season			World Series			All-Star Game		
Year	Club	Home runs	Year	Club	Home runs	Year	Club	Home runs
1914	Boston (A).....	0	1926	New York (A)....	47	1915	Boston (A).....	0
1915	Boston (A).....	4	1927	New York (A)....	60	1916	Boston (A).....	0
1916	Boston (A).....	3	1928	New York (A)....	54	1918	Boston (A).....	0
1917	Boston (A).....	2	1929	New York (A)....	46	1921	New York (A)....	1
1918	Boston (A).....	11	1930	New York (A)....	49	1922	New York (A)....	0
1919	Boston (A).....	29	1931	New York (A)....	46	1923	New York (A)....	3
1920	New York (A)....	54	1932	New York (A)....	41	1926	New York (A)....	4
1921	New York (A)....	59	1933	New York (A)....	34	1927	New York (A)....	2
1922	New York (A)....	35	1934	New York (A)....	22	1928	New York (A)....	3
1923	New York (A)....	41	1935	Boston (N).....	6	1932	New York (A)....	2
1924	New York (A)....	46						
1925	New York (A)....	25						
			Total.....	714		Total.....	15	

Hodges Joins Select List

Gil Hodges, the Brooklyn Dodgers' first baseman, joined a select group of sluggers when he hit four home runs in a game against the Boston Braves on Aug. 31, 1950.

Minor League Baseball

Source: Robert L. Finch, Publicity Director, National Association of Professional Baseball Leagues.

PENNANT WINNERS IN 1950

Asterisk indicates play-offs determine championship.

CLASS AAA

League and champion	Play-off winner
American Association—Minneapolis.....	Columbus
International—Rochester (N. Y.).....	Baltimore
Pacific Coast—Oakland (Calif.).....	No play-offs

CLASS AA

Southern Association—Atlanta.....	Nashville
Texas—Beaumont.....	San Antonio*

CLASS A

Central—Flint (Mich.).....	Flint
Eastern—Wilkes-Barre (Pa.).....	Wilkes-Barre
South Atlantic—Macon (Ga.).....	Macon
Western—Omaha (Nebr.).....	Sioux City (Iowa)

CLASS B

Big State—Texarkana (Texas).....	Texarkana*
Carolina—Winston-Salem.....	Winston-Salem
Fla. International—Havana (Cuba).....	Miami*
Inter-State—Wilmington (Del.).....	Wilmington
Piedmont—Portsmouth (Va.).....	Roanoke (Va.)
Southeastern—Pensacola (Fla.).....	Pensacola
Three-I—Terre Haute (Ind.).....	Terre Haute
Tri-State—Knoxville (Tenn.).....	Rock Hill (S. C.)
Western Int'l—Yakima (Wash.).....	No play-offs

CLASS C

Arizona-Texas—Juarez (Mexico).....	El Paso (Texas)*
Border—Ottawa (Ont.).....	Ogdensburg (N. Y.)
California—Ventura.....	Modesto
Canadian-American—Quebec.....	Quebec
Cotton States—Pine Bluff (Ark.).....	Hot Springs
East Texas—Gladewater.....	Marshall*
Evangeline—Lafayette (La.).....	Baton Rouge
Gulf Coast—Crowley (La.).....	Jacksonville (Texas)
Middle Atlantic—Oil City (Pa.).....	Butler (Pa.)

League and champion

Northern—St. Cloud (Minn.).....	Sioux Falls (S. D.)
Pioneer—Pocatello (Idaho).....	Billings (Mont.)
Provincial—St. Johns.....	St. Johns
Rio Grande Valley—	
Harlingen (Texas).....	Corpus Christi (Texas)*
Sunset—Mexicali (Mexico).....	El Centro (Calif.)
Western Assn.—Joplin (Mo.).....	Hutchinson (Kans.)
W. Texas—N. Mexico—	
Pampa (Texas).....	Albuquerque (N. M.)*

CLASS D

Alabama State—Enterprise.....	Dothan
Appalachian—Bluefield (W. Va.).....	Bristol (Va.)
Blue Ridge—Elkin (N. C.).....	Mount Airy (N. C.)
Coastal Plain—Roanoke Rapids	
(N. C.).....	New Bern (N. C.)
Far West—Klamath Falls (Oreg.).....	Redding (Calif.)
Florida State—Orlando.....	DeLand
Georgia-Alabama—LaGrange (Ga.).....	LaGrange
Georgia-Florida—Albany (Ga.).....	Tallahassee (Fla.)
Georgia State—Dublin.....	
Kansas-Okla.—Mo.—Ponca City (Okla.).....	Ponca City
Kitty—Mayfield (Ky.).....	Called off
Longhorn—Odessa (Texas).....	Odessa*
Miss.-Ohio Valley—Centralia (Ill.).....	Called off
Mountain States—Harlan (Ky.).....	Harlan
North Atlantic—Lebanon (Pa.).....	Lebanon
No. Car. State—Salisbury.....	Landis
Ohio-Indiana—Marion (Ohio).....	Marion
Pony—Hornell (N. Y.).....	Olean (N. Y.)
Sooner State—Ada (Okla.).....	McAlester*
Tobacco State—Lumberton (N. C.).....	Rockingham
Virginia State—Emporia.....	Emporia
Western Carolina—Newton-Conover.....	Lenoir
Wisconsin State—Oshkosh.....	Oshkosh

† Final series called off after Centralia and Paducah had won semifinals.

Final 1950 Regular Season Standings

AMERICAN ASSOCIATION (AAA)

	W.	L.	Pct.		W.	L.	Pct.
Minneapolis...	90	64	.584	Louisville.....	82	71	.536
Indianapolis...	85	67	.559	Milwaukee.....	68	85	.444
Columbus.....	84	69	.549	Toledo.....	65	87	.428
St. Paul.....	83	69	.546	Kansas City....	54	99	.353

TEXAS LEAGUE (AA)

	W.	L.	Pct.		W.	L.	Pct.
Beaumont.....	91	62	.595	Dallas.....	74	78	.487
Fort Worth.....	88	64	.579	Okla. City.....	72	79	.477
Tulsa.....	83	69	.546	Shreveport.....	63	91	.409
San Antonio.....	79	75	.513	Houston.....	61	93	.396

INTERNATIONAL LEAGUE (AAA)

	W.	L.	Pct.		W.	L.	Pct.
Rochester.....	92	59	.609	Springfield....	74	78	.487
Montreal.....	86	67	.562	Syracuse.....	74	79	.484
Baltimore.....	85	68	.556	Toronto.....	60	90	.400
Jersey City....	81	70	.536	Buffalo.....	56	97	.366

PACIFIC COAST LEAGUE (AAA)

	W.	L.	Pct.		W.	L.	Pct.
Oakland.....	118	82	.590	San Francisco	100	100	.500
San Diego.....	114	86	.570	Seattle,....	96	104	.480
Hollywood.....	104	96	.520	Los Angeles.	86	114	.430
Portland.....	101	99	.505	Sacramento.	81	119	.405

SOUTHERN ASSOCIATION (AA)

	W.	L.	Pct.		W.	L.	Pct.
Atlanta.....	92	59	.609	New Orleans..	71	79	.473
Birmingham...	87	62	.584	Mobile.....	70	79	.470
Nashville.....	86	64	.573	Chattanooga...	59	89	.399
Memphis.....	81	70	.536	Little Rock...	52	96	.351

Equitable Life of New York City won the National Baseball Federation championship for the second year in a row by defeating Youngstown (Ohio), 2 games to 0, in the final.

CENTRAL LEAGUE (A)

	W.	L.	Pct.		W.	L.	Pct.
Flint.....	80	53	.602	Grand Rapids..	64	68	.485
Muskegon.....	75	64	.540	Charleston....	58	73	.443
Dayton.....	69	63	.523	Saginaw.....	56	81	.409

EASTERN LEAGUE (A)

	W.	L.	Pct.		W.	L.	Pct.
Wilkes-Barre...	90	48	.652	Utica.....	64	73	.467
Binghamton...	81	58	.583	Williamsport..	61	77	.442
Hartford.....	80	59	.576	Elmira.....	58	81	.417
Albany.....	66	73	.475	Scranton.....	54	85	.388

SOUTH ATLANTIC (SALLY) LEAGUE (A)

	W.	L.	Pct.		W.	L.	Pct.
Macon.....	90	63	.588	Columbus.....	78	73	.517
Columbia.....	83	70	.542	Greenville.....	68	85	.444
Savannah.....	83	70	.542	Augusta.....	66	87	.431
Charleston.....	79	72	.523	Jacksonville.....	63	90	.412

WESTERN LEAGUE (A)

	W.	L.	Pct.		W.	L.	Pct.
Omaha.....	96	58	.623	Denver.....	75	79	.487
Sioux City....	89	65	.578	Colo. Springs..	72	82	.468
Des Moines....	84	70	.545	Lincoln.....	69	85	.448
Wichita.....	77	77	.500	Pueblo.....	54	100	.351

JUNIOR WORLD SERIES RECORD

International League (I) vs. American Association (AA)

No series in 1905, 1908 to 1916, inclusive; 1918, 1919 and 1935.

Year	Winner	Manager	Games won	Loser	Manager	Games won
1904	Buffalo (I)	George Stallings	2	St. Paul	Mike Kelley	1
1906*	Buffalo (I)	George Stallings	3	Columbus	Bill Clymer	2
1907	Toronto (I)	Joe Kelley	4	Columbus	Bill Clymer	1
1917	Indianapolis (AA)	Jack Hendricks	4	Toronto	Nap Lajoie	1
1920	Baltimore (I)	Jack Dunn	5	St. Paul	Mike Kelley	1
1921	Louisville (AA)	Joe McCarthy	5	Baltimore	Jack Dunn	3
1922	Baltimore (I)	Jack Dunn	5	St. Paul	Mike Kelly	2
1923	Kansas City (AA)	Wilbur Good	5	Baltimore	Jack Dunn	4
1924*	St. Paul (AA)	Nick Allen	5	Baltimore	Jack Dunn	4
1925	Baltimore (I)	Jack Dunn	5	Louisville	Joe McCarthy	3
1926	Toronto (I)	Dan Howley	5	Louisville	Bill Meyer	0
1927	Toledo (AA)	Casey Stengel	5	Buffalo	Bill Clymer	1
1928*	Indianapolis (AA)	Bruno Betzel	5	Rochester	Billy Southworth	1
1929	Kansas City (AA)	Dutch Zwilling	5	Rochester	Billy Southworth	4
1930	Rochester (I)	Billy Southworth	5	Louisville	Al Sothoron	3
1931	Rochester (I)	Billy Southworth	5	St. Paul	Al Leifield	3
1932	Newark (I)	Al Mamaux	4	Minneapolis	Donie Bush	2
1933	Columbus (AA)	Ray Blades	5	Buffalo	Ray Schalk	3
1934	Columbus (AA)	Ray Blades	5	Toronto	Ike Boone	4
1936	Milwaukee (AA)	Al Sothoron	4	Buffalo	Ray Schalk	1
1937	Newark (I)	Oscar Vitt	4	Columbus	Burt Shotton	3
1938	Kansas City (AA)	Bill Meyer	4	Newark	Johnny Neun	3
1939	Louisville (AA)	Bill Burwell	4	Rochester	Billy Southworth	3
1940	Newark (I)	Johnny Neun	4	Louisville	Bill Burwell	2
1941	Columbus (AA)	Burt Shotton	4	Montreal	Clyde Sukeforth	2
1942	Columbus (AA)	Eddie Dyer	4	Syracuse	Jewel Ens	1
1943	Columbus (AA)	Nick Cullop	4	Syracuse	Jewel Ens	1
1944	Baltimore (I)	Tommy Thomas	4	Louisville	Harry Leibold	2
1945	Louisville (AA)	Harry Leibold	4	Newark	Bill Meyer	2
1946	Montreal (I)	Clay Hopper	4	Louisville	Harry Leibold	2
1947	Milwaukee (AA)	Nick Cullop	4	Syracuse	Jewel Ens	3
1948	Montreal (I)	Clay Hopper	4	St. Paul	Walter E. Alston	1
1949	Indianapolis (AA)	Al Lopez	4	Montreal	Clay Hopper	2
1950	Columbus (AA)	Rollie Hemsley	4	Baltimore	Nick Cullop	1

* Played tie game.

JUNIOR WORLD SERIES

Columbus (AA) vs. Baltimore (I)

- *1st game—Columbus 5, Baltimore 1
- *2d game—Baltimore 8, Columbus 1
- *3d game—Columbus 8, Baltimore 5
- 4th game—Columbus 5, Baltimore 2
- 5th game—Columbus 6, Baltimore 3

* At Baltimore.

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
Columbus Redbirds	4	1	.800
Baltimore Orioles	1	4	.200

DIXIE SERIES

San Antonio (TL) vs. Nashville (SA)

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
San Antonio Missions	4	3	.571
Nashville Vols	3	4	.429

Marathon Game to Rochester

The longest game in the history of the International League—a 22-inning battle between the Rochester Red Wings and the Jersey City Giants at Rochester on Aug. 13, 1950—found the home team finishing on top, 3-2. Both pitchers, Tommy Poholsky of Rochester and Andy Tomasic, went the distance.

1950 MOST VALUABLE PLAYERS

American League—Phil Rizzuto, New York shortstop
National League—Jim Konstanty, Philadelphia pitcher

WATER SKIING, 1950

Source: American Water Ski Association.

NATIONAL OPEN CHAMPIONSHIPS (At Seattle, Wash.)

	Total points
Men—Dick Pope, Jr., Winter Haven, Fla.	1100
Women—Willia Worthington McGuire, Oswego, Oreg.	1100
Junior boys—Skillman Suydam, Orlando, Fla.	1100
Junior girls—Mary Lois Thornhill, Winter Haven, Fla.	1200
Mixed doubles—Rod Anderson-Doris Roswald, Seattle.	—

CANADIAN OPEN CHAMPIONSHIPS (At Toronto)

Men—Dick Pope, Jr.	925
Women—Evelyn Wolford, Massapequa, N. Y.	1000
Junior boys—Emilio Zamudio, Cuernavaca, Mexico.	1025
Junior girls—Mary Lois Thornhill.	1100

McGuire Sets Water Ski Record

Jake McGuire of Winter Haven, Fla., broke the water ski jumping record during the 1950 United States championships at Seattle, Wash., with a leap of 80 feet. The previous mark of 68 feet was held by Buddy Boyle.

THE OLYMPIC GAMES

(W)—Site of Winter games. (S)—Site of Summer games.

1896—Athens	1912—Stockholm	1928—Amsterdam (S)	1936—Berlin (S)
1900—Paris	1920—Antwerp	1932—Lake Placid (W)	1948—St. Moritz (W)
1904—St. Louis	1924—Chamonix (W)	1932—Los Angeles (S)	1948—London (S)
1906—Athens	1924—Paris (S)	1936—Garmisch-Parten-	1952—Scheduled for
1908—London	1928—St. Moritz (W)	kirchen (W)	Oslo (W) and
			Helsinki (S)

THE first Olympic Games of which there is record occurred in 776 B.C. and consisted of one event, a great foot race of about 200 yards held on a plain by the River Alpheus (now the Ruphla) just outside the little town of Olympia in Greece. It was from that date that the Greeks began to keep their calendar by "Olympiads," the four-year spans between the celebrations of the famous games. There was a religious as well as an athletic significance to the ancient games and the shrines, temples and sacred fires within the Olympic enclosure were the scenes of worship all through the year whereas the Olympic Games, at the height of their popularity, never lasted more than five days and were held only once every four years.

The competition was entirely amateur at the start and the only prizes were laurel wreaths. Only free Greek citizens were allowed to compete and they had to undergo a strict training course that lasted ten months. But civic rivalry led to trickery and professionalism and the

games became degraded after some centuries. When Rome conquered Greece, the Roman emperors turned the Olympic Games from patriotic, religious and athletic festivals into carnivals and circuses. They dragged on malodorously until they were finally halted by decree of Emperor Theodosius I of Rome in A.D. 394.

The modern Olympic Games, which started in Athens in 1896, are the result of the devotion of a French educator, Baron Pierre de Coubertin, to the idea that, since boys and athletics have gone together down the ages, education and athletics might well go hand-in-hand toward a better international understanding. He planned a revival of the ancient Olympic Games on a world-wide basis and succeeded in getting nine nations to send athletes to the first of the modern games in 1896. Since then more than 29,000 athletes representing 58 nations have competed in the games.

Interrupted for the second time by war, the modern Olympic Games were resumed at London in 1948.

OLYMPIC GAMES CHAMPIONS, 1896-1948

Source: United States Olympic Association

TRACK AND FIELD—MEN

60-Meter Run

1900	A. E. Kraenzlein, United States.....	7s.
1904	Archie Hahn, United States.....	7s.

100-Meter Run

1896	T. E. Burke, United States.....	12s.
1900	F. W. Jarvis, United States.....	10.8s.
1904	Archie Hahn, United States.....	11s.
1906	Archie Hahn, United States.....	11.2s.
1908	R. E. Walker, South Africa.....	10.8s.
1912	R. C. Craig, United States.....	10.8s.
1920	C. W. Paddock, United States.....	10.8s.
1924	H. M. Abrahams, Great Britain.....	10.6s.
1928	Percy Williams, Canada.....	10.8s.
1932	Eddie Tolan, United States.....	10.3s.
1936	Jesse Owens, United States.....	10.3s.*
1948	Harrison Dillard, United States.....	10.3s.

* With the wind.

200-Meter Run

1900	J. W. B. Tewksbury, United States.....	22.2s.
1904	Archie Hahn, United States.....	21.6s.

1908	R. Kerr, Canada.....	22.4s.
1912	R. C. Craig, United States.....	21.7s.
1920	Allan Woodring, United States.....	22s.
1924	J. V. Scholz, United States.....	21.6s.
1928	Percy Williams, Canada.....	21.8s.
1932	Eddie Tolan, United States.....	21.2s.
1936	Jesse Owens, United States.....	20.7s.
1948	Melvin E. Patton, United States.....	21.1s.

400-Meter Run

1896	T. E. Burke, United States.....	54.2.
1900	M. W. Long, United States.....	49.4.
1904	H. L. Hillman, United States.....	49.2.
1906	Paul Pilgrim, United States.....	53.2.
1908	W. Halswelle, Great Britain (walkover).....	50s.
1912	C. D. Reidpath, United States.....	48.2s.
1920	B. G. D. Rudd, South Africa.....	49.6s.
1924	E. H. Liddell, Great Britain.....	47.6s.
1928	Ray Barbuti, United States.....	47.8s.
1932	William Carr, United States.....	46.2s.
1936	Archie Williams, United States.....	46.5s.
1948	Arthur Wint, Jamaica, B.W.I.....	46.2s.

800-Meter Run

1896	E. H. Flack, Great Britain	2m.11s.
1900	A. E. Tysoe, Great Britain	2m.14s.
1904	J. D. Lightbody, United States	1m.56s.
1906	Paul Pilgrim, United States	2m.12s.
1908	M. W. Sheppard, United States	1m.52.8s.
1912	J. E. Meredith, United States	1m.51.9s.
1920	A. G. Hill, Great Britain	1m.53.4s.
1924	D. G. A. Lowe, Great Britain	1m.52.4s.
1928	D. G. A. Lowe, Great Britain	1m.51.8s.
1932	Thomas Hampson, Great Britain	1m.49.8s.
1936	John Woodruff, United States	1m.52.9s.
1948	Malvin Whitfield, United States	1m.49.2s.

1,500-Meter Run

1896	E. H. Flack, Great Britain	4m.33.2s.
1900	C. Bennett, Great Britain	4m.6s.
1904	J. D. Lightbody, United States	4m.54s.
1906	J. D. Lightbody, United States	4m.12s.
1908	M. W. Sheppard, United States	4m.34s.
1912	A. N. S. Jackson, Great Britain	3m.56.8s.
1920	A. G. Hill, Great Britain	4m.1.8s.
1924	Paavo Nurmi, Finland	3m.53.6s.
1928	H. E. Larva, Finland	3m.53.2s.
1932	Luigi Beccali, Italy	3m.51.2s.
1936	J. E. Lovelock, New Zealand	3m.47.8s.
1948	Henri Eriksson, Sweden	3m.49.8s.

5,000-Meter Run

1912	H. Kolehmainen, Finland	14m.36.6s.
1920	J. Guillemot, France	14m.55.6s.
1924	Paavo Nurmi, Finland	14m.31.2s.
1928	Willie Ritola, Finland	14m.38s.
1932	Lauri Lehtinen, Finland	14m.30s.
1936	Gunnar Hockert, Finland	14m.22.2s.
1948	Gaston Reiff, Belgium	14m.17.6s.

5-Mile Run

1906	H. Hawtrey, Great Britain	26m.26.2s.
1908	E. R. Voigt, Great Britain	25m.11.2s.

10,000-Meter Run

1912	H. Kolehmainen, Finland	31m.20.8s.
1920	Paavo Nurmi, Finland	31m.45.8s.
1924	Willie Ritola, Finland	30m.23.2s.
1928	Paavo Nurmi, Finland	30m.18.8s.
1932	Janusz Kusociński, Poland	30m.11.4s.
1936	Ilmar Salminen, Finland	30m.15.4s.
1948	Emil Zatopek, Czechoslovakia	29m.59.6s.

Marathon

1896	S. Loues, Greece	2h.55m.20s.
1900	Teato, France	2h.59m.
1904	T. J. Hicks, United States	3h.28m.53s.
1906	W. J. Sherring, Canada	2h.51m.23.6s.
1908	John J. Hayes, United States	2h.55m.18.4s.
1912	K. K. McArthur, South Africa	2h.32m.35.8s.
1920	H. Kolehmainen, Finland	2h.32m.35.8s.
1924	A. O. Stenroos, Finland	2h.41m.22.6s.
1928	El Ouafi, France	2h.32m.57s.
1932	Juan Zabala, Argentina	2h.31m.36s.
1936	Kitei Son, Japan	2h.29m.19.2s.
1948	Delfo Cabrera, Argentina	2h.34m.51.6s.

110-Meter Hurdles

1896	Curtis, United States	17.6s.
1900	A. E. Kraenzlein, United States	15.4s.
1904	F. W. Schule, United States	16s.
1906	R. G. Leavitt, United States	16.2s.
1908	Forrest Smithson, United States	15s.
1912	F. W. Kelly, United States	15.1s.
1920	E. J. Thomson, Canada	14.8s.
1924	D. C. Kinsey, United States	15s.
1928	S. Atkinson, South Africa	14.8s.
1932	George Saling, United States	14.6s.
1936	Forrest Towns, United States	14.2s.
1948	William Porter, United States	13.9s.

200-Meter Hurdles

1900	A. E. Kraenzlein, United States	25.4s.
1904	H. L. Hillman, United States	24.6s.

400-Meter Hurdles

1900	J. W. B. Tewksbury, United States	57.6s.
1904	H. L. Hillman, United States	53s.
1908	C. J. Bacon, United States	55s.
1920	F. F. Loomis, United States	54s.
1924	F. M. Taylor, United States	52.6s.
1928	Lord David Burghley, Great Britain	53.4s.
1932	Robert Tisdall, Ireland	51.8s.*
1936	Glenn Hardin, United States	52.4s.
1948	Roy Cochran, United States	51.1s.

* Record not allowed.

2,500-Meter Steeplechase

1900	G. W. Orton, United States	7m.34s.
1904	J. D. Lightbody, United States	7m.39.6s.

3,000-Meter Steeplechase

1920	P. Hodge, Great Britain	10m.2.4s.
1924	Willie Ritola, Finland	9m.33.6s.
1928	T. A. Loukola, Finland	9m.21.8s.
1932	Volmari Iso-Hollo, Finland	10m.33.4s.*
1936	Volmari Iso-Hollo, Finland	9m.3.8s.
1948	Thure Sjostrand, Sweden	9m.4.6s.

* About 3,450 meters—extra lap by error.

3,200-Meter Steeplechase

1908	A. Russell, Great Britain	10m.47.8s.
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4,000-Meter Steeplechase

1900	C. Rimmer, Great Britain	12m.58.4s.
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3,000-Meter Team

1912	United States	9 pts.
1920	United States	10 pts.
1924	Finland	8 pts.

3-Mile Team

1908	Great Britain	6 pts.
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8,000-Meter X-Country

1912	H. Kolehmainen, Finland	45m.11.6s.
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8,000-Meter X-Country Team

1912	Sweden	
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10,000-Meter X-Country

1920	Paavo Nurmi, Finland	27m.15s.
1924	Paavo Nurmi, Finland	32m.54.8s.

10,000-Meter X-Country Team

1912	Sweden	10 pts.
1920	Finland	10 pts.
1924	Finland	11 pts.

1,500-Meter Walk

1906	George V. Bonhag, United States	7m.12.6s.
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3,000-Meter Walk

1906	G. Stantics, Hungary	
1920	Ugo Frigerio, Italy	13m.14.2s.

3,500-Meter Walk

1908	G. E. Larnar, Great Britain	14m.55s.
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10,000-Meter Walk

1912	G. H. Goulding, Canada	46m.28.4s.
1920	Ugo Frigerio, Italy	48m.6.2s.
1924	Ugo Frigerio, Italy	47m.49s.
1948	John Mikaelsson, Sweden	45m.13.2s.

10-Mile Walk

1908	G. E. Larnar, Great Britain	1h.15m.57.4s.
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50,000-Meter Walk

1932	Thomas W. Green, Great Britain	4h.50m.10s.
1936	Harold Whitlock, Great Britain	4h.30m.41.4s.
1948	John Ljunggren, Sweden	4h.41m.52s.

400-Meter Relay

1912	Great Britain	42.4s.
1920	United States	42.2s.
1924	United States	41s.
1928	United States	41s.
1932	United States	40s.
1936	United States	39.8s.
1948	United States	40.6s.

1,600-Meter Relay

1908	United States	3m.27.2s.
1912	United States	3m.16.6s.
1920	Great Britain	3m.22.2s.
1924	United States	3m.16s.
1928	United States	3m.14.2s.
1932	United States	3m.8.2s.
1936	Great Britain	3m.9s.
1948	United States	3m.10.4s.

Pole Vault

1896	W. W. Hoyt, United States	10 ft. 9½ in.
1900	I. K. Baxter, United States	10 ft. 9.9 in.
1904	C. E. Dvorak, United States	11 ft. 6 in.
1906	Gonder, France	11 ft. 6 in.
1908	A. C. Gilbert, United States	12 ft. 2 in.
	E. T. Cook, Jr., United States	
1912	H. J. Babcock, United States	12 ft. 11½ in.
1920	F. K. Foss, United States	13 ft. 5 in.
1924	L. S. Barnes, United States	12 ft. 11½ in.
1928	Sabin W. Carr, United States	13 ft. 9¾ in.
1932	William Miller, United States	14 ft. 1½ in.
1936	Earle Meadows, United States	14 ft. 3¾ in.
1948	Guinn Smith, United States	14 ft. 1¼ in.

Standing High Jump

1900	R. C. Ewry, United States	5 ft. 5 in.
1904	R. C. Ewry, United States	4 ft. 11 in.
1906	R. C. Ewry, United States	5 ft. 1¾ in.
1908	R. C. Ewry, United States	5 ft. 2 in.
1912	Platt Adams, United States	5 ft. 4¾ in.

Running High Jump

1896	E. H. Clark, United States	5 ft. 11¼ in.
1900	I. K. Baxter, United States	6 ft. 2½ in.
1904	S. S. Jones, United States	5 ft. 11 in.
1906	Con Leahy, Ireland	5 ft. 9¾ in.
1908	H. F. Porter, United States	6 ft. 3 in.
1912	A. W. Richards, United States	6 ft. 4 in.
1920	R. W. Landon, United States	6 ft. 4¾ in.
1924	H. M. Osborn, United States	6 ft. 5½ in.
1928	Robert W. King, United States	6 ft. 4¾ in.
1932	Duncan McNaughton, Canada	6 ft. 5½ in.
1936	Cornelius Johnson, United States	6 ft. 7¼ in.
1948	John Winter, Australia	6 ft. 6 in.

Standing Broad Jump

1900	R. C. Ewry, United States	10 ft. 6½ in.
1904	R. C. Ewry, United States	11 ft. 4¾ in.
1906	R. C. Ewry, United States	10 ft. 10 in.
1908	R. C. Ewry, United States	10 ft. 11¼ in.
1912	C. Tsciliftras, Greece	11 ft. ¼ in.

Running Broad Jump

1896	E. H. Clark, United States	20 ft. 9½ in.
1900	A. E. Kraenzlein, United States	23 ft. 6½ in.
1904	Myer Prinstein, United States	24 ft. 1 in.
1906	Myer Prinstein, United States	23 ft. 7½ in.
1908	Frank Irons, United States	24 ft. 6½ in.
1912	A. L. Gutterston, United States	24 ft. 11¼ in.

1920	Wm. Petterson, Sweden	23 ft. 5½ in.
1924	DeHart Hubbard, United States	24 ft. 5½ in.
1928	Edward B. Hamm, United States	25 ft. 4¾ in.
1932	Edward Gordon, United States	25 ft. ¾ in.
1936	Jesse Owens, United States	26 ft. 5½ in.
1948	Willie Steele, United States	25 ft. 8 in.

Standing Hop, Step, and Jump

1900	R. C. Ewry, United States	34 ft. 8½ in.
1904	R. C. Ewry, United States	34 ft. 7¼ in.

Running Hop, Step, and Jump

1896	J. B. Connolly, United States	45 ft.
1900	Myer Prinstein, United States	47 ft. 4¾ in.
1904	Myer Prinstein, United States	47 ft.
1906	P. O'Connor, Ireland	46 ft. 2 in.
1908	T. J. Ahearne, Great Britain	48 ft. 11¼ in.
1912	G. Lindblom, Sweden	48 ft. 5¼ in.
1920	V. Tuulos, Finland	47 ft. 6¾ in.
1924	A. W. Winter, Australia	50 ft. 11½ in.
1928	Mikio Oda, Japan	49 ft. 10¾ in.
1932	Chuhei Nambu, Japan	51 ft. 7 in.
1936	Naoto Tajima, Japan	52 ft. 5½ in.
1948	Arne Ahman, Sweden	50 ft. 6¼ in.

16-Lb. Shot-put

1896	R. S. Garrett, United States	36 ft. 2 in.
1900	R. Sheldon, United States	46 ft. 3½ in.
1904	Ralph Rose, United States	48 ft. 7 in.
1906	M. J. Sheridan, United States	40 ft. 4¾ in.
1908	Ralph Rose, United States	46 ft. 7½ in.
1912	P. J. McDonald, United States	50 ft. 4 in.
1920	V. Porhola, Finland	48 ft. 7½ in.
1924	Clarence Houser, United States	49 ft. 2½ in.
1928	John Kuck, United States	52 ft. 1½ in.
1932	Leo Sexton, United States	52 ft. 6¾ in.
1936	Hans Woellke, Germany	53 ft. 1¾ in.
1948	Wilbur Thompson, United States	56 ft. 2 in.

16-Lb. Shot-put (Both Hands)

1912	Ralph Rose, United States	90 ft. 5½ in.
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16-Lb. Hammer Throw

1900	J. J. Flanagan, United States	167 ft. 4 in.
1904	J. J. Flanagan, United States	168 ft. 1 in.
1908	J. J. Flanagan, United States	170 ft. 4¾ in.
1912	M. J. McGrath, United States	177 ft. 7 in.
1920	P. J. Ryan, United States	173 ft. 5½ in.
1924	F. D. Tootell, United States	174 ft. 10¼ in.
1928	Patrick O'Callaghan, Ireland	168 ft. 7¾ in.
1932	Patrick O'Callaghan, Ireland	176 ft. 11¼ in.
1936	Karl Hein, Germany	185 ft. 4 in.
1948	Irmu Nemeth, Hungary	183 ft. 11½ in.

56-Lb. Weight Throw

1904	E. Desmarteau, Canada	34 ft. 4 in.
1920	P. J. McDonald, United States	36 ft. 11½ in.

Discus Throw

1896	R. S. Garrett, United States	95 ft. 7½ in.
1900	R. Bauer, Hungary	118 ft. 2.9 in.
1904	M. J. Sheridan, United States	128 ft. 10½ in.
1906	M. J. Sheridan, United States	136 ft. ½ in.
1908	M. J. Sheridan, United States	134 ft. 2 in.
1912	A. R. Taipale, Finland	148 ft. 3.9 in.
1920	E. Niklander, Finland	146 ft. 7 in.
1924	Clarence Houser, United States	151 ft. 5½ in.
1928	Clarence Houser, United States	155 ft. 2½ in.
1932	John Anderson, United States	162 ft. 4¾ in.
1936	Ken Carpenter, United States	165 ft. 7¾ in.
1948	Adolfo Consolini, Italy	173 ft. 2 in.

Discus Throw—Greek Style

1906	W. Jaervinen, Finland	115 ft. 4 in.
1908	M. J. Sheridan, United States	124 ft. 8 in.

Discus Throw (Right and Left Hand)

1912	A. R. Taipale, Finland.....	271 ft. 10½ in.
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Javelin Throw

1906	E. Lemming, Sweden.....	175 ft. 6 in.
1908	E. Lemming, Sweden.....	179 ft. 10½ in.
1912	E. Lemming, Sweden.....	198 ft. 11¼ in.
1920	Jonni Myyra, Finland.....	215 ft. 9¼ in.
1924	Jonni Myyra, Finland.....	206 ft. 6¼ in.
1928	E. H. Lundquist, Sweden.....	218 ft. 6— in.
1932	Matti Jarvinen, Finland.....	238 ft. 7 in.
1936	Gerhard Stoeck, Germany.....	235 ft. 8½ in.
1948	Kaj Rautavaara, Finland.....	228 ft. 10½ in.

Javelin Throw—Free Style

1908	E. Lemming, Sweden.....	178 ft. 7½ in.
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Javelin Throw (Both Hands)

1912	J. J. Saaristo, Finland.....	358 ft. 11½ in.
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Pentathlon

1906	H. Mellander, Sweden.....	24 pts.
1912	F. R. Bie, Norway.....	21 pts.
1920	E. R. Lehtonen, Finland.....	14 pts.
1924	E. R. Lehtonen, Finland.....	16 pts.

Decathlon

1912	H. Wieslander, Sweden.....	7,724.495 pts.
1920	H. Lovland, Norway.....	6,804.35 pts.
1924	M. M. Osborn, United States.....	7,710.775 pts.
1928	Paavo Yrjola, Finland.....	8,053.29 pts.
1932	James Bausch, United States.....	8,462.23 pts.
1936	Glenn Morris, United States.....	7,900 pts.
1948	Robert B. Mathias, United States.....	7,139 pts.

(Old point system used from 1912 to 1932; new point system started in 1936.)

TRACK AND FIELD—WOMEN**100-Meter Run**

1928	Elizabeth Robinson, United States.....	12.2s.
1932	Stanislawa Walasiewicz, Poland.....	11.9s.
1936	Helen Stephens, United States.....	11.5s.
1948	Fanny Blankers-Koen, Holland.....	11.9s.

200-Meter Run

1948	Fanny Blankers-Koen, Holland.....	24.4s.
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800-Meter Run

1928	Lina Radke, Germany.....	2m.16.8s.
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80-Meter Hurdles

1932	Mildred Didrikson, United States.....	11.7s.
1936	Trebisonda Valla, Italy.....	11.7s.
1948	Fanny Blankers-Koen, Holland.....	11.2s.

400-Meter Relay

1928	Canada.....	48.4s.
1932	United States.....	47s.
1936	United States.....	46.9s.
1948	Holland.....	47.5s.

Running High Jump

1928	Ethel Catherwood, Canada.....	5 ft. 3 in.
1932	Jean Shiley, United States.....	5 ft. 5¼ in.
1936	Isolva Csak, Hungary.....	5 ft. 3 in.
1948	Alice Coachman, United States.....	5 ft. 6½ in.

Running Broad Jump

1948	V. O. Gyarmati, Hungary.....	18 ft. 8¼ in.
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Discus Throw

1928	H. Konopacka, Poland.....	129 ft. 11½ in.
1932	Lillian Copeland, United States.....	133 ft. 2 in.
1936	Gisela Mauermaier, Germany.....	156 ft. 3¾ in.
1948	Micheline Ostermeyer, France.....	137 ft. 6½ in.

Javelin Throw

1932	Mildred Didrikson, United States.....	143 ft. 4 in.
1936	Tilly Fleischer, Germany.....	148 ft. 2¾ in.
1948	H. Bauma, Austria.....	149 ft. 6 in.

Shot-put

1948	Micheline Ostermeyer, France.....	45 ft. 1½ in.
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SWIMMING—MEN**50 Yards**

1904	Zoltan de Halomay, Hungary.....	28s.
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100 Yards

1896	Alfred Hajos, Hungary.....	1m.22.2s.
1904	Zoltan de Halomay, Hungary.....	1m.2.8s.*
1906	C. M. Daniels, United States.....	1m.13s.
1908	C. M. Daniels, United States.....	1m.5.6s.
1912	Duke P. Kahanamoku, United States.....	1m.3.4s.
1920	Duke P. Kahanamoku, United States.....	1m.1.4s.
1924	John Weissmuller, United States.....	59s.
1928	John Weissmuller, United States.....	58.6s.
1932	Yasuji Miyazaki, Japan.....	58.2s.
1936	Ferenc Csik, Hungary.....	57.6s.
1948	Walter Ris, United States.....	57.3s.

* 100 yards.

220 Yards

1900	F. C. V. Lane, Australia.....	
1904	C. M. Daniels, United States.....	2m.44.2s.

400 Yards

1904	C. M. Daniels, United States.....	6m.16.2s.*
1906	Otto Sheff, Austria.....	6m.23.8s.
1908	H. Taylor, Great Britain.....	5m.36.8s.
1912	G. R. Hodgson, Canada.....	5m.24.4s.
1920	N. Ross, United States.....	5m.26.8s.
1924	John Weissmuller, United States.....	5m.4.2s.
1928	Albert Zorilla, Argentina.....	5m.1.6s.
1932	Clarence Crabbe, United States.....	4m.48.4s.
1936	Jack Medica, United States.....	4m.44.5s.
1948	William Smith, United States.....	4m.41s.

* 440 yards.

500 Yards

1896	Paul Neumann, Austria.....	
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880 Yards

1904	Emil Rausch, Germany.....	13m.11.4s.
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1,000 Yards

1900	Jarvis, Great Britain.....	
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1,200 Yards

1896	Alfred Hajos, Hungary.....	
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1,500 Yards

1908	H. Taylor, Great Britain.....	22m.48.4s.
1912	G. R. Hodgson, Canada.....	22m.
1920	N. Ross, United States.....	22m.23.2s.
1924	A. M. Charlton, Australia.....	20m.6.6s.
1928	Arne Borg, Sweden.....	19m.51.8s.
1932	Kusuo Kitamura, Japan.....	19m.12.4s.
1936	Noboru Terada, Japan.....	19m.13.7s.
1948	James McLane, United States.....	19m.18.5s.

1,600 Yards

1906	H. Taylor, Great Britain.....	28m.28s.
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One Mile

1904	Emil Rausch, Germany.....	27m.18.2s.
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Plunge for Distance

1904	W. E. Dickey, United States.....	62 ft. 6 in.
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800-Meter Relay

1908	Great Britain.....	10m.55.6s.
1912	Australia.....	10m.11.6s.
1920	United States.....	10m.4.4s.
1924	United States.....	9m.53.4s.
1928	United States.....	9m.36.2s.
1932	Japan.....	8m.58.4s.
1936	Japan.....	8m.51.5s.
1948	United States.....	8m.46s.

100-Meter Backstroke

1904	Walter Brack, Germany.....	1m.16.8s.*
1908	Arno Bieberstein, Germany.....	1m.24.6s.
1912	Harry Hebner, United States.....	1m.21.2s.
1920	Warren Kealoha, United States.....	1m.15.2s.
1924	Warren Kealoha, United States.....	1m.13.2s.
1928	George Kojac, United States.....	1m.8.2s.
1932	Masaji Kiyokawa, Japan.....	1m.8.6s.
1936	Adolph Kiefer, United States.....	1m.5.9s.
1948	Allen Stack, United States.....	1m.6.4s.

* 100 yards.

200-Meter Breast Stroke

1908	F. Holman, Great Britain.....	3m.9.2s.
1912	Walter Bathe, Germany.....	3m.1.8s.
1920	H. Malmroth, Sweden.....	3m.4.4s.
1924	R. D. Skelton, United States.....	2m.56.6s.
1928	Y. Tsuruta, Japan.....	2m.48.8s.
1932	Yoshiyuki Tsuruta, Japan.....	2m.45.4s.
1936	Tetsuo Hamuro, Japan.....	2m.42.5s.
1948	Joseph Verdeur, United States.....	2m.39.3s.

400-Meter Breast Stroke

1904	Georg Zacharias, Germany.....	7m.23.6s.
1920	H. Malmroth, Sweden.....	6m.31.8s.

1,000-Meter Team Race

1906	Hungary.....	17m.16.2s.
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Springboard Diving

	Points
1904 G. E. Sheldon, United States	12 2-3
1906 Gottlob Walz, Germany	
1908 Albert Zuerner, Germany	85.5
1912 Paul Guenther, Germany	6
1920 L. E. Kuehn, United States	6
1924 A. C. White, United States	7
1928 P. Desjardins, United States	185.04
1932 Michael Galitzen, United States	161.38
1936 Richard Degener, United States	163.57
1948 Bruce Harlan, United States	163.64

Fancy High Diving

	Points
1912 Eric Adlerz, Sweden.....	7
1920 C. E. Pinkston, United States.....	7
1924 A. C. White, United States.....	9

Plain High Diving

	Points
1908 H. Johanssen, Sweden.....	83.70
1912 Erik Adlerz, Sweden.....	7
1920 Arvid Wallman, Sweden.....	7
1924 Richard Eve, Australia.....	13½

Plain and Fancy High Diving

	Points
1928 P. Desjardins, United States.....	98.74
1932 Harold Smith, United States.....	124.80
1936 Marshall Wayne, United States.....	113.58
1948 Samuel Lee, United States.....	130.05

WATER POLO

1900	Great Britain.....
1904	United States.....
1908	Great Britain defeated Belgium
1912	Great Britain defeated Austria
1920	Great Britain defeated Belgium
1924	France defeated Belgium
1928	Germany defeated Hungary
1932	Hungary defeated Germany
1936	Hungary.....
1948	Italy.....

SWIMMING—WOMEN

100 Meters

1920	Ethelda Bleibtrey, United States.....	1m.13.6s.
1922	Fanny Durack, Australia.....	1m.22.2s.
1924	Ethel Lackie, United States.....	1m.12.4s.
1928	Albina Osipowich, United States.....	1m.11s.
1932	Helene Madison, United States.....	1m.6.8s.
1936	Hendrika Mastenbroek, Holland.....	1m.5.9s.
1948	Greta Andersen, Denmark.....	1m.6.3s.

300 Meters

1920	Ethelda Bleibtrey, United States.....	4m.34s.
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400 Meters

1924	Martha Norelius, United States.....	6m.2.2s.
1928	Martha Norelius, United States.....	5m.42.8s.
1932	Helene Madison, United States.....	5m.28.5s.
1936	Hendrika Mastenbroek, Holland.....	5m.26.4s.
1948	Ann Curtis, United States.....	5m.17.8s.

400-Meter Relay

1912	Great Britain.....	5m.52.8s.
1920	United States.....	5m.11.6s.
1924	United States.....	4m.58.8s.
1928	United States.....	4m.47.6s.
1932	United States.....	4m.38s.
1936	Holland.....	4m.36s.
1948	United States.....	4m.23.2s.

100-Meter Backstroke

1924	Sybil Bauer, United States.....	1m.23.2s.
1928	Marie Braun, Holland.....	1m.22s.
1932	Eleanor Holm, United States.....	1m.19.4s.
1936	Dina Senff, Holland.....	1m.18.9s.
1948	Karen Harup, Denmark.....	1m.14.4s.

200-Meter Breast Stroke

1924	Lucy Morton, Great Britain.....	3m.33.2s.
1928	Hilde Schrader, Germany.....	3m.12.6s.
1932	Clare Dennis, Australia.....	3m.6.3s.
1936	Hideoo Maehata, Japan.....	3m.3.6s.
1948	Nel van Vliet, Netherlands.....	2m.57.2s.

Plain High Diving

	Points
1912 Greta Johansson, Sweden.....	39 9
1920 Miss Fryland, Denmark.....	6
1924 Caroline Smith, United States.....	9

Fancy Springboard Diving

	Points
1920 Aileen Riffin, United States.....	9
1924 Elizabeth Becker, United States.....	8
1928 Helen Meany, United States.....	78 6½
1932 Georgia Coleman, United States.....	87.52
1936 Marjorie Gestring, United States.....	89.27
1948 Victoria M. Draves, United States.....	109.74

Plain and Fancy High Diving

		Points
1928	Elizabeth B. Pinkston, United States.....	31.60
1932	Dorothy Poynton, United States.....	40.26
1936	Mrs. Dorothy Poynton Hill, United States.....	33.93
1948	Victoria M. Draves, United States.....	68.87

POLO

1900	Great Britain	1924	Argentina
1908	Great Britain	1936	Argentina
1920	Great Britain		

BOXING**Flyweight**

1904	George V. Finnegan, United States (105-lb. class)
1920	Frank Genaro, United States
1924	Fidel La Barba, United States
1928	Anton Kocsis, Hungary
1932	Stephen Enekes, Hungary
1936	Willi Kaiser, Germany
1948	Pascuel Perez, Argentina

Bantamweight

1904	O. L. Kirk, United States (115-lb. class)
1908	H. Thomas, Great Britain
1920	Walker, South Africa
1924	W. H. Smith, South Africa
1928	Vittorio Tamagnini, Italy
1932	Horace Gwynne, Canada
1936	Ulderico Sergio, Italy
1948	Tibor Csik, Hungary

Featherweight

1904	O. L. Kirk, United States
1908	R. K. Gunn, Great Britain
1920	Fritsch, France
1924	John Fields, United States
1928	L. Van Klaveren, Holland
1932	Carmelo Ambrosio Robledo, Argentina
1936	Oscar Casanovas, Argentina
1948	Ernesto Formenti, Italy

Lightweight

1904	H. J. Spanger, United States
1908	F. Grace, Great Britain
1920	Samuel Mosberg, United States
1924	Harold Nielsen, Denmark
1928	Carlo Orlandi, Italy
1932	Lawrence Stevens, South Africa
1936	Imre Harangi, Hungary
1948	Gerry Dreyer, South Africa

Welterweight

1904	Al Young, United States
1920	Schneider, Canada
1924	J. S. Delarge, Belgium
1928	Edward Morgan, New Zealand
1932	Edward Flynn, United States
1936	Sten Suvio, Finland
1948	Julius Torma, Czechoslovakia

Middleweight

1904	Charles Mayer, United States
1908	J. W. H. T. Douglas, Great Britain
1920	H. W. Mallin, Great Britain
1924	H. W. Mallin, Great Britain
1928	Piero Toscani, Italy
1932	Carmen Barth, United States
1936	Jean Despeaux, France
1948	Laszlo Papp, Hungary

Light Heavyweight

1920	Edward Eagan, United States
1924	H. J. Mitchell, Great Britain
1928	Victoria Avendano, Argentina
1932	David E. Carstens, South Africa
1936	Roger Michelot, France
1948	George Hunter, South Africa

Heavyweight

1904	Sam Berger, United States
1908	A. L. Oldham, Great Britain
1920	Rawson, Great Britain
1924	Otto Von Porath, Norway
1928	A. Rodriguez Jurado, Argentina
1932	Santiago A. Lovell, Argentina
1936	Herbert Runge, Germany
1948	Rafael Iglesias, Argentina

WRESTLING**CATCH-AS-CATCH-CAN****Flyweight**

1904	R. Curry, United States (105-lb. class)
1948	V. L. Viitala, Finland

Bantamweight

1904	George N. Mehnert, U. S. (115-lb. class)
1908	George N. Mehnert, U. S. (119-lb. class)
1924	Kustaa Pihlajamaki, Finland
1928	K. Mäkinen, Finland
1932	Robert Edward Pearce, United States
1936	Odon Zombory, Hungary
1948	Nassuh Akar, Turkey

Featherweight

1896	Karl Schumann, Germany
1904	I. Niflot, United States
1908	G. S. Dole, United States
1920	Charles E. Ackerly, United States
1924	Robin Reed, United States
1928	Allie Morrison, United States
1932	Herman Pihlajamaki, Finland
1936	Kustaa Pihlajamaki, Finland
1948	Gazanfer Bilge, Turkey

Lightweight

1904	B. J. Bradshaw, United States
1908	G. de Relwyskow, Great Britain
1920	Kalle Anttila, Finland
1924	Russell Vis, United States
1928	O. Kapp, Estonia
1932	Charles Pacome, France
1936	Karoly Karpati, Hungary
1948	Celal Atik, Turkey

Welterweight

1904	O. F. Roehm, United States
1924	Hermann Gehri, Switzerland
1928	A. J. Haavisto, Finland
1932	Jack F. Van Bebber, United States
1936	Frank Lewis, United States
1948	Yasar Dogu, Turkey

Middleweight

1904	Charles Erickson, United States
1908	S. V. Bacon, Great Britain
1920	E. Leino, Finland
1924	Fritz Haggmann, Switzerland
1928	E. Kyburg, Switzerland
1932	Ivar Johansson, Sweden
1936	Emile Poivre, France
1948	Glenn Brand, United States

Light Heavyweight

1920	Anders Larsson, Sweden
1924	John Spellman, United States
1928	T. S. Sjostedt, Sweden
1932	Peter Joseph Mehringer, United States
1936	Knut Fridell, Sweden
1948	Henry Wittenberg, United States

Heavyweight

1904	B. Hansen, United States
1908	G. C. O'Kelly, Great Britain
1920	Roth, Switzerland
1924	Harry Steele, United States
1928	Johan C. Richthoff, Sweden
1932	Johan C. Richthoff, Sweden
1936	Kristjan Palusalu, Estonia
1948	George Bobis, Hungary

BASKETBALL

1904	United States	1936	United States
1948	United States		

ROWING**Eight-Oared Shell**

1900	United States	6m.7½s.
1904	United States	
1908	Great Britain	6m.33½s.
1912	Great Britain	6m.15s.
1920	United States	6m.2½s.
1924	United States	6m.33½s.
1928	United States	6m.3½s.
1932	United States	6m.37½s.
1936	United States	6m.25.4s.
1948	United States	5m.56.7s.

Single Sculls

1900	Barrelet, Belgium	7m.35½s.
1904	Frank B. Greer, United States	
1908	H. T. Blackstaffe, Great Britain	
1912	W. D. Kinear, Great Britain	7m.47½s.
1920	J. B. Kelly, United States	7m.35s.
1924	Jack Beresford, Jr., Great Britain	7m.49—s.
1928	Henry Robert Pearce, Australia	7m.11s.
1932	Henry Robert Pearce, Australia	7m.44½s.
1936	Gustav Schaffer, Germany	8m.21.5s.
1948	Mervyn Wood, Australia	7m.24.4s.

Double Sculls

1904	United States	
1908	J. R. K. Fenning and G. L. Thomson, Great Britain	
1920	J. B. Kelly and Paul V. Costello, United States	7m 9s

Nine Swim English Channel on Same Day

Aquatic history was made on Aug. 22, 1950, when nine swimmers, including two women, conquered the English Channel in a mass race. Organized by a London newspaper, the event, which drew 24 starters, was won by Hassan Abd-el Rehim, an Egyptian Army officer. He covered the 19 miles from Cape Griz Nez, France, to Dover, England, in the record time of 10 hours 53 minutes, 12 minutes faster than the generally accepted mark of 11 hours 5 minutes, set by Georges Michel of France in 1926. Hassan's latest victory over the Channel was his third, another record. He made the grade in 1948 and repeated in 1949.

An American, Florence Chadwick of San Diego, Calif., was the first to swim the

1924	J. B. Kelly and Paul V. Costello, United States	6m.34s.
1928	Paul V. Costello and Charles J. McIlvaine, United States	6m.41½s.
1932	Kenneth Myers and W. E. Garrett Gilmore, United States	7m.17½s.
1936	Jack Beresford and Leslie Southwood, Great Britain	7m.20.8s.
1948	B. H. Bushnell and R. D. Burnell, Great Britain	6m.51.3s.

Four-Oared Shell with Coxswain

1900	Germany	
1906	Italy	
1912	Germany	6m.59½s.
1920	Switzerland	6m.54s.
1924	Switzerland	7m.18½s.
1928	Italy	6m.47½s.
1932	Germany	7m.19½s.
1936	Germany	7m.16.2s.
1948	United States	6m.50.3s.

Four-Oared Shell without Coxswain

1904	United States	
1908	Great Britain	
1924	Great Britain	
1928	Great Britain.....	6m.36s.
1932	Great Britain.....	6m.58½s.
1936	Germany.....	7m.1.8s.
1948	Italy.....	6m.39s.

Pair-Oared Shell with Coxswain

1900	R. Klein and F. A. Brandt, Holland	7m.34½s.
1906	Italy (1,600 Meters)	
1906	Italy (1,000 Meters)	
1920	M. Olgeni and G. Scatturin, Italy	7m.56s.
1924	M. Candevau and A. Felber, Switzerland	8m.39s.
1928	H. W. Schochlin and C. F. Schochlin, Switzerland	7m.42½s.
1932	Joseph A. Schauers and Charles M. Kieffer, United States	8m.25½s.
1936	Gerhard Gustmann and Herbert Adamski, Germany	8m.36.9s.
1948	F. Pedersen and T. Henriksen, Denmark	8m.0.5s.

Pair-Oared Shell without Coxswain

1904	United States	10m.57s.
1908	J. Fenning and G. Thomson, Great Britain	9m.41s.
1924	W. H. Rosingh and A. C. Beynen, Holland	8m.19½s.
1928	K. Moeschter and B. Muller, Germany	7m.6½s.
1932	Lewis Clive and H. R. Arthur Edwards, Great Britain	8m.
1936	Willi Eichhorn and Hugo Strauss, Germany	8m.16.1s.
1948	J. H. T. Wilson and W. G. R. M. Laurie, Great Britain	7m.21.1s.

Channel in 1950. On Aug. 8 she went from Cape Griz Nez to Dover in 13 hours 20 minutes, erasing the former women's record of 14 hours 34 minutes, set by Gertrude Ederle on Aug. 6, 1926. Shirley May France of Somerset, Mass., attempted the crossing the same day that Miss Chadwick was in the water, but fell short of the mark by eight and a half miles.

The order of finish on Aug. 22:

	h.	m.
1. Hassan Abd-el Rehim, Egypt	10	53
2. Roger Le Morvan, France	11	03
3. Marech Hassan Hamid, Egypt	12	16
4. Sam Rockett, England	14	08
5. William F. Barnie, Scotland	14	49
6. Eileen Fenton, Greece	15	31
7. Jason Zirgona, Greece	16	17
8. Antonio Albertondo, Argentina	16	23
9. Jennie Kammergaard, Denmark	16	26

SPORTS ORGANIZATIONS AND INFORMATION BUREAUS

- ALL-AMERICAN GIRLS BASEBALL LEAGUE. 462 Wrigley Bldg., Chicago 11, Ill.
- AMATEUR ATHLETIC UNION OF THE U. S. 233 Broadway, New York 7, N. Y.
- AMATEUR BICYCLE LEAGUE OF AMERICA. 4233 - 205th St., Bayside, N. Y.
- AMATEUR FENCERS LEAGUE OF AMERICA. Room 3406, 122 E. 42d St., New York 17, N. Y.
- AMATEUR HOCKEY ASSN. OF THE U. S. Madison Square Garden, 307 W. 49th St., New York 19, N. Y.
- AMATEUR SKATING UNION OF THE U. S. 18093 Ilene St., Detroit 21, Mich.
- AMATEUR SOFTBALL ASSN. OF AMERICA. Suite 401, 11 Hill St., Newark 2, N. J.
- AMATEUR TRAPSHOOTING ASSN. Vandalia, Ohio.
- AMERICAN AUTOMOBILE ASSN. Pennsylvania Ave. at 17th St., N.W., Washington 6, D. C.
- AMERICAN BADMINTON ASSN. 47 Colburn Rd., Wellesley Hills 82, Mass.
- AMERICAN BASKETBALL LEAGUE. 120 Wall St., New York 5.
- AMERICAN BOWLING CONGRESS. 2200 N. Third St., Milwaukee 12, Wis.
- AMERICAN CANOE ASSN. 8 P Skyline Gardens, North Arlington, N. J.
- AMERICAN HOCKEY LEAGUE. Empire State Bldg., N. Y. 1.
- AMERICAN HORSE SHOWS ASSN. 90 Broad St., New York 4.
- AMERICAN KENNEL CLUB. 221 Fourth Ave., New York 3.
- AMERICAN LAWN BOWLING ASSN. 10276 Orton Ave., Los Angeles 64, Calif.
- AMERICAN LEAGUE SERVICE BUREAU (Baseball). 310 S. Michigan Ave., Chicago 4, Ill.
- AMERICAN MOTORCYCLE ASSOCIATION. 106 Buttes Ave., Columbus 8, Ohio
- AMERICAN POWER BOAT ASSN. 700 Canton Ave., Detroit 7, Mich.
- AMERICAN RACING DRIVERS CLUB (midget auto racing). 304 West 50th St., New York 19, N. Y.
- AMERICAN WATER SKI ASSN. 1661 Monroe Ave., N.W., Grand Rapids, Mich.
- ASSN. OF PROFESSIONAL BALL PLAYERS OF AMERICA. 524 S. Spring St., Los Angeles 13, Calif.
- BASEBALL COMMISSIONER A. B. CHANDLER. 2601 Carew Tower, Cincinnati 2, Ohio
- BILLIARD CONGRESS OF AMERICA. 921 Edison Bldg., Toledo 4, Ohio
- EASTERN COLLEGE ATHLETIC CONFERENCE. Biltmore Hotel, New York 17, N. Y.
- ELIAS BASEBALL BUREAU, 11 West 42d St., New York 18
- FISH AND WILDLIFE SERVICE. U. S. Dept. of the Interior, Washington 25, D. C.
- INTERNATL. AMATEUR ATHLETIC FEDERATION. 71 St. George's Sq., London, S.W.1, England
- INTERNATIONAL GAME FISH ASSN. American Museum of Natural History, New York 24, N. Y.
- NATL. ARCHERY ASSN. OF THE U. S. North Pleasant St., Amherst, Mass.
- NATL. ASSN. OF AMATEUR OARSMEN. 119 Heller Parkway, Newark 4, N. J.
- NATL. ASSN. OF ANGLING AND CASTING CLUBS. 222 Papin Ave., Webster Groves 19, Mo.
- NATL. ASSN. OF PROFESSIONAL BASEBALL LEAGUES (Minors). 720 E. Broad St., Columbus 15, Ohio
- NATL. ASSN. OF STATE RACING COMMISSIONERS. Box 156, Lexington, Ky.
- NATL. BASEBALL CONGRESS. Wichita 1, Kans.
- NATL. BASKETBALL ASSN. Empire State Bldg., New York 1, N. Y.
- NATL. BOXING ASSN. Room 2053, New Municipal Center, Washington 1, D. C.
- NATL. COLLEGIATE ATHLETIC ASSN. La Salle Hotel, Chicago 2, Ill.
- NATL. DUCK PIN BOWLING CONGRESS. 1420 New York Ave., N.W., Washington 5, D. C.
- NATL. FASTBALL LEAGUE. 431 S. Dearborn St., Chicago 5.
- NATL. FOOTBALL LEAGUE. 1518 Walnut St., Philadelphia 2.
- NATL. HOCKEY LEAGUE. Sun Life Bldg., Montreal, Quebec.
- NATL. HORSESHOE PITCHERS ASSN. OF AMERICA. 912 Melrose Ave., Santa Cruz, Calif.
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- NATL. RIFLE ASSN. OF AMERICA. 1600 Rhode Island Ave., Washington 6, D. C.
- NATL. SKEET SHOOTING ASSN. Route 5, Box 595E, Dallas 9, Texas
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- NATL. STEEPLECHASE AND HUNT ASSN. 250 Park Ave., New York 17, N. Y.
- NEW YORK RACING ASSNS. SERVICE BUREAU. 250 Park Ave., New York 17, N. Y.
- NEW YORK STATE ATHLETIC (BOXING) COMMISSION. 80 Centre St., New York 13, N. Y.
- NORTH AMERICAN YACHT RACING UNION. 37 West 44th St., New York 18, N. Y.
- PACIFIC COAST HOCKEY LEAGUE. 334 Security Bldg., Seattle 1, Wash.
- PROFESSIONAL GOLFERS' ASSN. OF AMERICA. 134 N. La Salle St., Chicago 2, Ill.
- PROFESSIONAL LAWN TENNIS ASSN. OF THE U. S. 51 Columbus Ave., New York 23, N. Y.
- ROLLER SKATING RINK OPERATORS ASSN. OF AMERICA. Box 857, Detroit 31, Mich.
- THE JOCKEY CLUB. 250 Park Ave., New York 17, N. Y.
- THOROUGHbred RACING ASSNS. OF THE U. S. 400 Madison Ave., New York 17, N. Y.
- U. S. AMATEUR ROLLER SKATING ASSN. 120 West 42d St., New York 18, N. Y.
- U. S. CHESS FEDERATION. 208 S. La Salle St., Chicago 4, Ill.
- U. S. FIGURE SKATING ASSN. 1122 Leader Bldg., Cleveland
- U. S. GOLF ASSN. 40 E. 38th St., New York 16, N. Y.
- U. S. HOCKEY LEAGUE. Baker Bldg., Minneapolis 2, Minn.
- U. S. INTERCOLLEGIATE LACROSSE ASSN. 3317 Richmond Ave., Baltimore 13, Md.
- U. S. LAWN TENNIS ASSN. 120 Broadway, New York 5, N. Y.
- U. S. OLYMPIC ASSN. 10 N. La Salle St., Chicago 2, Ill.
- U. S. POLO ASSN. 250 Park Ave., New York 17, N. Y.
- U. S. SOCCER FOOTBALL ASSN. 320 Fifth Ave., New York 1.
- U. S. SQUASH RACQUETS ASSN. Room 1402, 274 Madison Ave., New York 16, N. Y.
- U. S. TABLE TENNIS ASSN. 2501 Pocahontas Ave., Rock Hill Village 17, Mo.
- U. S. TROTting ASSN. 1349 E. Broad St., Columbus 5, Ohio
- WOMAN'S INTERNATIONAL BOWLING CONGRESS. 85 E. Gay St., Columbus 15, Ohio

TRACK AND FIELD

RUNNING, jumping, hurdling and throwing weights—track and field sports, in other words—are as natural to boys and young men as eating, drinking and breathing. Unorganized competition in this form of sport goes back beyond the Cave Man era. Organized competition begins with the first recorded Olympic Games in Greece, 776 B. C., when Coroebus of Elis won the only event on the program, a race of approximately 200 yards. The Olympic Games, with an ever-widening program of events, continued until “the glory that was Greece” had faded and “the grandeur that was Rome” was tarnished, and finally were abolished by decree of Emperor Theodosius I of Rome in A. D. 394. The Tallteann Games of Ireland are supposed to have antedated the first Olympic Games by some centuries, but we have no records of the specific events and winners thereof.

Professional contests of speed and strength were popular at all times and in many lands, but the widespread competition of amateur athletes in track and field

sports is a comparatively modern development. The first organized amateur athletic meet of record was sponsored by the Royal Military Academy at Woolwich, England, in 1849. Oxford and Cambridge track and field rivalry began in 1864 and the English amateur championships were established in 1866. In the United States such organizations as the New York Athletic Club and the Olympic Club of San Francisco conducted track and field meets in the 1870's, and a few colleges joined to sponsor a meet in 1874. The success of the college meet led to the formation of the Intercollegiate Association of Amateur Athletes of America and the holding of an annual set of championship games beginning in 1876.

Many athletic clubs joined the National Association of Amateur Athletes of America, formed in 1879, but dissension broke up this organization and the Amateur Athletic Union, organized in 1888, has been the ruling body in American amateur athletics since that time.

Track and Field Statistics

Source: *Official A.A.U. Track and Field Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y.

MEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, October, 1950

RUNNING

Event	Record	Holder	Home country	Where made	Date
100 yd.....	9.3 s.....	Melvin E. Patton.....	United States.....	Fresno, Calif.....	May 15, 1948
220 yd.....	20.3 s.....	Jesse Owens.....	United States.....	Ann Arbor, Mich.....	May 25, 1935
		Jesse Owens.....	United States.....	Chicago, Ill.....	June 20, 1936
440 yd.....	46 s.....	Herbert McKenley.....	Jamaica, B.W.I.....	Berkeley, Calif.....	June 5, 1948
880 yd.....	1 m. 49.2 s.....	Sydney C. Wooderson.....	Gt. Britain.....	London, England.....	Aug. 20, 1938
1 mi.....	4 m. 01.4 s.....	Gunder Hagg.....	Sweden.....	Malmö, Sweden.....	July 17, 1945
2 mi.....	8 m. 42.8 s.....	Gunder Hagg.....	Sweden.....	Stockholm.....	Aug. 4, 1944
3 mi.....	13 m. 32.4 s.....	Gunder Hagg.....	Sweden.....	Gothenburg.....	Sept. 20, 1942
6 mi.....	28 m. 30.8 s.....	Viljo Heino.....	Finland.....	Kouvola, Finland.....	Sept. 1, 1949
10 mi.....	49 m. 22.2 s.....	Viljo Heino.....	Finland.....	Helsinki.....	Sept. 14, 1945
15 mi.....	1 h. 17.28.6 s.....	Mikko Hietanen.....	Finland.....	Gamlakarleby, Finland.....	May 23, 1948
1 hr.....	12 mi. 29 yd.....	Viljo Heino.....	Finland.....	Turku, Finland.....	Sept. 30, 1945

WALKING

Event	Record	Holder	Home country	Where made	Date
2 mi.....	12 m. 45 s.....	Werner Hardmo.....	Sweden.....	Malmö.....	Sept. 1, 1945
5 mi.....	35 m. 33 s.....	Harold G. Churche.....	Gt. Britain.....	London.....	June 16, 1949
7 mi.....	48 m. 15.2 s.....	Werner Hardmo.....	Sweden.....	Kumla, Sweden.....	Sept. 9, 1945
10 mi.....	1 h. 10 m. 55 s.....	John Mikaelsson.....	Sweden.....	Stockholm.....	Aug. 23, 1945
20 mi.....	2 h. 41 m. 7 s.....	H. Olsson.....	Sweden.....	Boras, Sweden.....	Aug. 15, 1943
30 mi.....	4 h. 24 m. 54.2 s.....	F. Cornet.....	France.....	Paris.....	Oct. 11, 1942
1 hr.....	8 mi. 1025 yd.....	John Mikaelsson.....	Sweden.....	Stockholm.....	Sept. 1, 1945
2 hr.....	15 mi. 1521 yd.....	Olle Anderson.....	Sweden.....	Stockholm.....	Sept. 15, 1945

RUNNING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
100 m.....	10.2 s.....	Jesse Owens..... Harold Davis..... Lloyd LaBeach..... N. H. Ewell.....	United States..... United States..... Panamá..... United States.....	Chicago..... Compton, Calif..... Fresno, Calif..... Evanston, Ill.....	June 20, 1936 June 6, 1941 May 15, 1948 July 9, 1948
200 m.....	20.3 s.....	Jesse Owens.....	United States.....	Ann Arbor, Mich.....	May 25, 1935
400 m.....	45.9 s.....	Herbert McKenzie.....	Jamaica, B.W.I.....	Milwaukee, Wis.....	July 2, 1948
800 m.....	1 m. 46.6 s.....	Rudolf Harbig.....	Germany.....	Milan.....	July 15, 1939
1,000 m.....	2 m. 21.4 s.....	O. Rune Gustafsson..... Marcel Hansenne.....	Sweden..... France.....	Boras, Sweden..... Gothenburg.....	Sept. 4, 1945 Aug. 27, 1948
1,500 m.....	3 m. 43 s.....	Gunder Hagg..... Lennart Strand.....	Sweden..... Sweden.....	Gothenburg..... Malmo.....	July 7, 1944 July 15, 1947
2,000 m.....	5 m. 7 s.....	Gaston Reiff.....	Belgium.....	Brussels.....	Sept. 29, 1948
3,000 m.....	7 m. 58.8 s.....	Gaston Reiff.....	Belgium.....	Gavle, Sweden.....	Aug. 12, 1949
5,000 m.....	13 m. 58.2 s.....	Gunder Hagg.....	Sweden.....	Gothenburg.....	Sept. 20, 1942
10,000 m.....	29 m. 2.6 s.....	Emil Zatopek.....	Czechoslovakia.....	Turku.....	Aug. 4, 1950
20,000 m.....	1 h. 2 m. 40.2 s.....	Viljo Heino.....	Finland.....	Turku.....	Sept. 22, 1949
25,000 m.....	1 h. 20 m. 14 s.....	Mikko Hietanen.....	Finland.....	Gamlakarleby.....	May 23, 1948
30,000 m.....	1 h. 39 m. 14.6 s.....	F. K. Vanin.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Nov. 1, 1949
1 hour.....	19,339 meters.....	Viljo Heino.....	Finland.....	Turku.....	Sept. 30, 1945

WALKING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
3,000 m.....	11 m. 51.8 s.....	Werner Hardmo.....	Sweden.....	Malmö.....	Sept. 1, 1945
5,000 m.....	20 m. 26.8 s.....	Werner Hardmo.....	Sweden.....	Kumla.....	July 31, 1945
10,000 m.....	42 m. 39.6 s.....	Werner Hardmo.....	Sweden.....	Kumla.....	Sept. 9, 1945
15,000 m.....	1 h. 8 m. 28 s.....	D. Paraschivescu.....	Rumania.....	Bucharest.....	Mar. 20, 1949
20,000 m.....	1 h. 32 m. 28.4 s.....	John Mikaelsson.....	Sweden.....	Vaxjo.....	July 12, 1942
30,000 m.....	2 h. 28 m. 57.4 s.....	H. Olsson.....	Sweden.....	Boras.....	Aug. 15, 1943
50,000 m.....	4 h. 34 m. 3 s.....	Paul Sievert.....	Germany.....	Munich.....	Oct. 5, 1924
1 hr.....	13,812 m.....	John Mikaelsson.....	Sweden.....	Stockholm.....	Sept. 1, 1945
2 hr.....	25,531 m.....	Olle Anderson.....	Sweden.....	Stockholm.....	Sept. 15, 1945

HURDLES (10 hurdles)

Event	Record	Holder	Home country	Where made	Date
120 yd.....	13.6 s.....	Harrison Dillard..... R. A. Attlesley.....	United States..... United States.....	Lawrence, Kansas..... College Park, Md.....	Apr. 17, 1948 June 24, 1950
220 yd.....	22.3 s.....	Harrison Dillard.....	United States.....	Salt Lake City, Utah.....	June 21, 1947
440 yd.....	52.2 s.....	Roy Cochrane..... Richard Ault.....	United States..... United States.....	Des Moines, Iowa..... Oslo, Norway.....	Apr. 25, 1942 Aug. 31, 1949
110 m.....	13.6 s.....	Harrison Dillard..... R. A. Attlesley.....	United States..... United States.....	Lawrence, Kansas..... College Park, Md.....	Apr. 17, 1948 June 24, 1950
200 m.....	22.3 s.....	Fred Wolcott..... Harrison Dillard.....	United States..... United States.....	Princeton, N. J..... Salt Lake City, Utah.....	June 8, 1940 June 21, 1947
400 m.....	50.6 s.....	Glenn Hardin.....	United States.....	Stockholm.....	July 26, 1934

RELAY RACES

Event	Record	Holder	Home country	Where made	Date
440 yd. (4 x 110).....	40.5 s.....	Univ. of So. California..... (L. LaFond, W. C. Andersson, P. Jordan, A. Talley)	United States.....	Fresno, Calif.....	May 14, 1938
880 yd. (4 x 220).....	1 m. 24 s.....	Univ. of So. California..... (M. Patton, R. Frazier, G. Pasquali, N. Stocks)	United States.....	Los Angeles.....	May 20, 1949
1 mi. (4 x 440).....	3 m. 9.4 s.....	Univ. of California..... (John Reese, F. A. Froom, C. F. Barnes, Grover Klemmer)	United States.....	Los Angeles.....	June 17, 1941
2 mi. (4 x 880).....	7 m. 34.6 s.....	Univ. of California..... (John Reese, Grover Klemmer, Dick Peter, Clarence Barnes)	United States.....	Los Angeles.....	May 24, 1941
4 mi. (4 x 1 mile).....	16 m. 42.8 s.....	Gefle Idrottsforening..... (I. Bengtsson, G. Bergkvist, O. Aberg, H. Eriksson)	Sweden.....	Stockholm.....	Aug. 5, 1949

RELAY RACES—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
400 m. (4 x 100).....	39.8 s.....	U. S. A. National Team..... (Owens, Metcalfe, Draper, Wykoff)	United States.....	Berlin.....	Aug. 9, 1936
800 m. (4 x 200).....	1 m. 24 s.....	Univ. of So. California..... (M. Patton, R. Frazier, G. Pasquali, N. Stocks)	United States.....	Los Angeles.....	May 20, 1949
1600 m. (4 x 400).....	3 m. 8.2 s.....	U. S. A. National Team..... (Fuqua, Ablowich, Warner, Carr)	United States.....	Los Angeles.....	Aug. 7, 1932
3,200 m. (4 x 800).....	7 m. 29 s.....	Swedish National Team..... (T. Sten, O. Linder, S. Lindgard, Lennart Strand)	Sweden.....	Stockholm.....	Sept. 13, 1946
6,000 m. (4 x 1500).....	15 m. 30.2 s.....	Gefle Idrottsforening..... (I. Bengtsson, G. Bergkvist, O. Aberg, H. Eriksson)	Sweden.....	Stockholm.....	July 3, 1949

FIELD EVENTS

Event	Record	Holder	Home country	Where made	Date
High jump.....	6 ft. 11 in. (2.11 m.)	Les Steers.....	United States.....	Los Angeles.....	June 17, 1941
Running broad jump.....	26 ft. 8½ in. (8.13 m.)	Jesse Owens.....	United States.....	Ann Arbor.....	May 25, 1935
Rng. hop, step, jump.....	52 ft. 5½ in. (16 m.)	Naoto Tajima.....	Japan.....	Berlin.....	Aug. 6, 1936
Pole vault.....	15 ft. 7¾ in. (4.77 m.)	C. Warmerdam.....	United States.....	Modesto, Calif.....	May 23, 1942
16-lb. shot-put.....	58 ft. 4¾ in. (17.79 m.)	James Fuchs.....	United States.....	Oslo, Norway.....	June 28, 1949
Discus throw.....	186 ft. 11 in. (56.97 m.)	Fortune Gordien.....	United States.....	Tavastehus, Finland.....	Aug. 14, 1949
Javelin throw.....	258 ft. 2¾ in. (78.70 m.)	Yrjo Nikkanen.....	Finland.....	Kotka.....	Oct. 16, 1938
16-lb. hammer throw.....	196 ft. 5½ in. (59.88 m.)	Irme Nemeth.....	Hungary.....	Budapest.....	May 16, 1950

DECATHLON

Points	Holder	Home country	Where made	Date
8,642.....	Robert Mathias.....	United States.....	Tulare, Calif.....	June 29-30, 1950

WOMEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, October, 1950

RUNNING

Event	Record	Holder	Home country	Where made	Date
100 yd.....	10.7 s.	Marjorie Jackson.....	Australia.....	Newcastle, Austr.....	Mar. 31, 1950
220 yd.....	24.2 s.	F. E. Blankers-Koen.....	Netherlands.....	Brescia, Italy.....	June 29, 1950
880 yd.....	2 m. 19.7 s.	Olive Mary Hall.....	Great Britain.....	Mitcham, Eng.....	Aug. 27, 1938
60 m.....	7.3 s.	Stella Walasiewicz.....	Poland.....	Lemberg, Pol.....	Sept. 24, 1933
100 m.....	11.5 s.	Helen Stephens.....	United States.....	Berlin.....	Aug. 4, 1936
200 m.....	23.6 s.	F. E. Blankers-Koen.....	Netherlands.....	Amsterdam.....	June 13, 1948
800 m.....	2 m. 13.8 s.	Stella Walasiewicz.....	Poland.....	Warsaw.....	Aug. 15, 1935
		Anna Larsson.....	Sweden.....	Stockholm.....	Aug. 30, 1945

RELAY RACES

440 yd. (4 x 110).....	47.4 s.	National Team.....	Netherlands.....	Ryswyk, Neth.....	July 25, 1948
		(De Jongh, Witziers-Timmer, Kade-Koudys, Blankers-Koen)			
400 m. (4 x 100).....	46.4 s.	National Team.....	Germany.....	Berlin.....	Aug. 8, 1936
		(Albus, Krauss, Dollinger, Dörfeldt)			
800 m. (4 x 200).....	1 m. 41 s.	National Team.....	Netherlands.....	Hilversum, Neth.....	Aug. 27, 1944
		(Sluyters, Blankers-Koen, Timmer, Koudys)			
2,400 m. (3 x 800).....	6 m. 53.8 s.	National Team.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Oct. 28, 1949
		(Zhiljova, Dmitruk, Vasiljeva)			
1½ mi. (3 x 880).....	6 m. 53.8 s.	National Team.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Oct. 28, 1949
		(Zhiljova, Dmitruk, Vasiljeva)			

HURDLES

80 m.....	11 s.	F. E. Blankers-Koen.....	Netherlands.....	Amsterdam.....	June 20, 1948
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FIELD EVENTS

Rng. high jump.....	15 ft. 7¼ in. (4.71 m.)	F. E. Blankers-Koen.....	Netherlands.....	Amsterdam.....	May 30, 1943
Broad jump.....	20 ft. 6 in. (6.25 m.)	F. E. Blankers-Koen.....	Netherlands.....	Leiden, Neth.....	Sept. 19, 1943
Shot-put.....	48 ft. 9 in. (14.86 m.)	K. A. Tocheniva.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Oct. 30, 1949
Discus throw.....	174 ft. 8½ in. (53.25 m.)	N. Dumbadze.....	U.S.S.R.....	Moscow.....	Aug. 8, 1948
Javelin throw.....	175 ft. 2¾ in. (53.41 m.)	N. V. Smirnitckaja.....	U.S.S.R.....	Moscow.....	Aug. 5, 1949

PENTATHLON

418 points.....	Gisela Mauermayer.....	Germany.....	Stuttgart.....	July 16-17, 1938
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INDOOR MILE WINNERS, 1950

Source: Joseph M. Sheehan, *The New York Times*

Phila. Inquirer—Fred Wilt, New York A. C.....	4:11.8
Boston K. of C.—George Wade, Yale.....	4:13.1
Wanamaker (Millrose A. A.)—Don Gehrmann, Wisconsin, and Fred Wilt*.....	4:09.3
Hunter (B. A. A.)—John Joe Barry, Ireland.....	4:13.4
Baxter (N.Y.A.C.)—George Wade.....	4:12.1
National A.A.U.—John Joe Barry.....	4:11.5
I.C. 4-A—Bill Mack, Michigan State.....	4:11
New York K. of C.—John Joe Barry.....	4:11.6
Heptagonal—George Wade.....	4:15.4
Big Ten—Don Gehrmann.....	4:10.4
Cleveland K. of C.—Leonard Truex, Ohio State.....	4:20.8
Chicago Relays—Don Gehrmann.....	4:09.5

* Decision disputed.

BOSTON MARATHON, 1950

(Fifty-fourth running)

Leading Finishers

	h. m. s.
1. Kee Yong Ham, Seoul, Korea.....	2:32:39
2. Kil Yoon Sang, Seoul, Korea.....	2:35:58
3. Yun Chil Choi, Seoul, Korea.....	2:39:47
4. John P. Lafferty, Boston.....	2:39:52
5. Johnny Kelley, Boston.....	2:43:45
6. Anthony Medeiros, Medford, Mass.....	2:47:15
7. Lloyd Balrston, Boston.....	2:49:46
8. Paul Collins, New York.....	2:50:13
9. Ed Romognoli, New York.....	2:52:50
10. Kenneth O'Connell, Cleveland.....	2:56:42
11. Michael J. O'Hara, New York.....	2:57:37
12. John C. Sterner, Brooklyn.....	2:58:02

The marathon distance is 26 miles 385 yards. The record for the Boston course is 2 hours 25 minutes 39 seconds, made by Yun Bok Su of Korea in 1947.

NATIONAL A. A. U. TRACK AND FIELD CHAMPIONS, 1950

Senior Outdoor

100 m.—Arthur Bragg, Morgan State.....	0:10.4
200 m.—Robert Tyler, Morgan State.....	0:21.1
400 m.—George Rhoden, Morgan State.....	0:46.5
800 m.—Mal Whitfield, Grand Street Boys Assn., New York.....	1:51.8
1,500 m.—John Twomey, Illinois A. C., Chicago.....	3:51.3
5,000 m.—Fred Wilt, New York A. C.....	15:19.4
10,000 m.—Horace Ashenfelter, Penn A. C., Philadelphia.....	32:44.3
110-m. hurdles—Dick Attlesley, Los Angeles A. C.....	0:13.6
200-m. hurdles—Bill Fleming, Notre Dame.....	0:23.6
400-m. hurdles—Charles Moore, Jr., N. Y. A. C.....	0:53.6
3,000-m. steeplechase—Warren Dreutzler, Michigan State.....	9:33.6
3,000-m. walk—Henry Laskau, Maccabi A. C., New York.....	13:09.6
Broad jump—Albert Holland, Northwestern U.....	25 ft. 9 in.
High jump—David Albritton, Dayton A. C.; John Heintzman, Bradley; Virgil Severns, Kansas State, and Jack Razetto, Los Angeles A. C. (tie).....	6 ft. 5½ in.
Discus—Fortune Gordien, Olympic Club.....	173 ft. 2½ in.
56-lb. weight—Frank Berst, N. Y. A. C.....	38 ft. 10½ in.
Hammer—Sam Felton, New York A. C.....	187 ft. ¾ in.
Hop, step, and jump—Gaylord Bryan, Olympic Club, San Francisco.....	47 ft. 11 in.
Javelin—Steve Seymour, Los Angeles A. C.....	228 ft. 10½ in.
Pole vault—Robert Richards, Illinois A. C.....	14 ft. 8 in.
Shot-put—Jim Fuchs, N. Y. A. C.....	57 ft. 2½ in.
Team—Olympic Club, San Francisco.....	79½ pts.
Decathlon—Robert Mathias, Tulare, Calif.....	8,042 pts.
All-around—Dale Keyser, College of Pacific.....	5,777 pts.
Pentathlon—Wilbur Ross, Newark, N. J.....	3,277 pts.
Marathon—Johnny Kelley, Boston.....	2:45:55.3
400-m. relay—Morgan State (Sam LaBeach, George Rhoden, Arthur Bragg, Robert Tyler)....	0:41
1,600-m. relay—Morgan State (LaBeach, Tyler, Bill Brown, Rhoden).....	3:09.7
2,900-m. relay (400, 200, 800, 1,500)—New York A. C. (Dan Sullivan, James Harrington, George Thompson, Fred Wilt).....	7:06.1

10-km. walk—Henry H. Laskau, New York.....	50:30.8
15-km. walk—Adolph Weinacker, Detroit.....	1:12:49
20-km. walk—Adolph Weinacker.....	1:40:10.8
25-km. walk—Adolph Weinacker.....	2:31
30-km. walk—Adolph Weinacker.....	2:48:43
35-km. walk—Adolph Weinacker.....	3:18:40
40-km. walk—Adolph Weinacker.....	3:43
50-km. walk—William Mihalo, Detroit.....	5:31:20
15-km. run—Louis White, New York Pioneer Club.....	50:32
20-km. run—Jesse Van Zant, Boston A. A.....	1:08:32
25-km. run—Jesse Van Zant.....	1:30:04.6
30-km. run—Kim Valentine, Boston A. A.....	1:42:47

Senior Indoor

60 yd.—Andy Stanfield, Seton Hall.....	0:06.2
600 yd.—Hugo Maiocco, New York Univ.....	1:11.2
1,000 yd.—Roscoe Browne, N. Y. Pioneer Club.....	2:15.6
1 mile—John Joe Barry, Ireland.....	4:11.5
3 miles—Curtis C. Stone, Shanahan Catholic Club, Philadelphia.....	13:57.2
60-yd. high hurdles—Harrison Dillard, Cleveland... ..	0:07.3
1 mile walk—Henry Laskau, Maccabi A. C.....	6:33.4
Sprint medley relay (440-100-220-300)—Villanova (James McKenna, John Holmes, John Furlinger, Joseph McCreary).....	1:53.6
1 mile relay—Morgan State (Sam LaBeach, Robert Tyler, Bill Brown, George Rhoden).....	3:19.9

2-mile relay—Georgetown (Pat O'Brien, Dave Boland, Dave Smith, Joseph Deady).....	7:44.1
Broad jump—Doug Fowlkes, N. Y. A. C.....	24 ft. 6¾ in.
High jump—John Vislocky, N. Y. A. C.....	6 ft. 6 in.
Pole vault—Robert Richards, Illinois A. C.....	14 ft.
Shot-put—Jim Fuchs, Yale.....	56 ft. ¾ in.
35-lb. weight—Gilbert Borjeson, Brown.....	57 ft. 5¼ in.
Team—New York Athletic Club.....	17 pts.

Junior Outdoor

100 m.—Jim Gallday, Chicago C. Y. O.....	0:10.6
200 m.—Arthur Bragg, Morgan State.....	0:21.3
400 m.—Stafford Thompson, N. Y. Pioneer Club.....	0:49.1
800 m.—Bill Jacobs, U. of Oklahoma.....	1:52.9
1,500 m.—Larry Ellis, N. Y. Pioneer Club.....	3:55.6
5,000 m.—Herb Semper, U. of Kansas.....	15:28.1
10,000 m.—Sal Escoto, New Orleans.....	33:33.5
110-m. hurdles—Roy Grieve, Bradley U.....	0:14.8
200-m. hurdles—Meredith Gouridine, N. Y. Pioneer Club.....	0:24.2
400-m. hurdles—Bob Devinney, U. of Kansas.....	0:53.1
3,000-m. steeplechase—Don Shanks, Warinanco A. C., Elizabeth, N. J.....	9:43.4
3,000-m. walk—Edward Forrester, Police Sports Assn., N. Y.....	14:58.3
Broad jump—James Knight, Kentucky State.....	24 ft. 5½ in.
High jump—Lewis Hall, U. of Florida.....	6 ft. 4¾ in.
Discus—James Robertson, Indiana U.....	151 ft. ¾ in.
56-lb. weight—Thomas Bane, Tufts College.....	33 ft. 1 in.
Hammer—Robert Backus, Tufts College.....	160 ft. 2¾ in.
Hop, step, and jump—John Udlsky, Police Sports Assn., N. Y.....	46 ft. ¾ in.
Javelin—William Miller, Shanahan C. C.....	218 ft. 5½ in.
Pole vault—Dale Keyser, College of Pacific; William Hillyard, Baldwin-Wallace College, and Richard Calisch, Chicago (tie).....	13 ft.
Shot-put—George Ker, Olympic Club.....	53 ft. 7¼ in.
Team—Pioneer Club, N. Y.....	91½ pts.

Junior Indoor

60 yd.—Doug Fowlkes, New York A. C.....	0:06.6
60-yd. high hurdles—Donald Leek, No. Carolina College.....	0:08
600 yd.—Hugo Maiocco, New York U.....	1:12.8
1,000 yd.—Stewart Ray, Rutgers.....	2:18.7
1 mile—Pat Duffy, Manhattan.....	4:22.9
3 miles—Bill Lucas, Manhattan.....	14:55.2
1 mile walk—John Humcke, Polish Falcons.....	7:05.9
Sprint medley relay (440-100-220-300)—New York U. (Richard Maiocco, William Payne, Hartley Lewis, Ira Kaplan).....	1:56
1 mile relay—Police Sports Assn. (Conway Boone, John Greaney, Paul Collins, Harold McDonnell).....	3:25.3
2-mile relay—New York U. (Howard Jacobson, Ted Foy, Gordon McKenzie, Larry Ellis).....	7:58.8
Broad jump—Doug Fowlkes.....	24 ft. 6¾ in.
High jump—Jim Webb, LaSalle College, and Jim Gillcrist, Manhattan (tie).....	6 ft. 2 in.
Shot-put—Harry Abeltin, Colgate.....	47 ft. 6¾ in.
35-lb. weight—Steve Dillon, St. Francis College.....	55 ft. 7½ in.
Pole vault—Ronald Lennox, N. Y. U.; Richard Lynn, N. Y. U., and Jack McGrath, New York A. C. (tie).....	12 ft. 6 in.
Team—Manhattan College.....	40 pts.

WATER POLO, 1950

National A. A. U. Champions

Senior outdoor—Whittier, Calif.
 Senior indoor—Illinois A. C., Chicago

History of the Mile Run

Year	Athlete and country	Where made	Time
1865	Webster, England	England	4:44.3
1866	C. B. Lawes, England	England	4:39
1868	W. M. Chinnery, England	England	4:33.2
1871	W. M. Chinnery, England	England	4:31.8
1874	Walter Slade, England	England	4:24.5
1881	Walter George, England	England	4:19.8
1884	Walter George, England	England	4:18.4
1895	F. E. Bacon, England	England	4:17
1895	T. P. Conneff, United States	United States	4:15.6
1911	John Paul Jones, United States	United States	4:15.4
1913	John Paul Jones, United States	United States	4:14.4
1915	Norman Taber, United States	United States	4:12.6
1923	Paavo Nurmi, Finland	Sweden	4:10.4
1931	Jules Ladoumègue, France	France	4:09.2
1933	John Lovelock, New Zealand	United States	4:07.6
1934	Glenn Cunningham, United States	United States	4:06.8
1937	Sydney Wooderson, England	England	4:06.4
1942	Gunder Hagg, Sweden	Sweden	4:06.2
1942	Gunder Hagg, Sweden	Sweden	4:04.6
1943	Arne Andersson, Sweden	Sweden	4:02.6
1944	Arne Andersson, Sweden	Sweden	4:01.6
1945	Gunder Hagg, Sweden	Sweden	4:01.4

EUROPEAN CHAMPIONSHIPS, 1950

(At Brussels, Belgium, Aug. 23-27)

100 m.—Etienne Bally, France	0:10.7
200 m.—Brian Shenton, Great Britain	0:21.5
400 m.—Derek Pugh, Great Britain	0:47.3
800 m.—John Parlett, Great Britain	1:50.5
1,500 m.—Willy Slykhuys, Holland	3:47.3
5,000 m.—Emil Zatopek, Czechoslovakia	14:03
10,000 m.—Emil Zatopek	29:12
Marathon—Jack Holden, Great Britain	2:32:13.2
110-m. hurdles—André Jacques Marie, France	0:14.6
400-m. hurdles—Armanda Fillput, Italy	0:51.9
3,000-m. steeplechase—Jindrich Roudny, Czechoslovakia	9:05.4
400-m. relay—U.S.S.R. (Szakajev, Kalpa-jev, Sanadze, Karakulov)	0:41.5
1,600-m. relay—Great Britain (Pike, Lewis, Scott, Pugh)	3:10.2
10-km. walk—A. Schwab, Switzerland	46:01.2
50-km. walk—Giuseppe Dordoni, Italy	4:40:42.6
Broad jump—Torfi Brynneirsson, Iceland	24 ft. ¾ in.
High jump—Alan Paterson, Great Britain	6 ft. 5½ in.
Discus—Adolfo Consolini, Italy	176 ft. 4¾ in.
Hammer—Sverre Strandl, Norway	182 ft. 9½ in.
Hop, step, and jump—Leonid Tscherbakov, U.S.S.R.	50 ft. 6 in.
Javelin—T. Hyttlainen, Finland	233 ft. 9½ in.
Pole vault—Ragnar Lundberg, Sweden	14 ft. 1½ in.
Shot-put—Gunnar Huseby, Iceland	54 ft. 11½ in.
Decathlon—Ignatz Heinrich, France	7,364 pts.
Team—France	82 pts.

SULLIVAN AWARD WINNERS

The James E. Sullivan Memorial Award is given annually to the amateur athlete voted by sports leaders as having done the most to advance the cause of sportsman-ship.

Year	Winner	Sport
1930	Robert T. Jones, Jr.	Golf
1931	Bernard E. Berlinger	Track and field
1932	James A. Bausch	Track and field
1933	Glenn Cunningham	Running
1934	William R. Bonthron	Running
1935	W. Lawson Little, Jr.	Golf
1936	Glenn Morris	Track and field
1937	J. Donald Budge	Tennis
1938	Donald R. Lash	Running
1939	Joseph W. Burk	Rowing
1940	J. Gregory Rice	Running
1941	Leslie MacMitchell	Running
1942	Cornelius Warmerdam	Pole vaulting
1943	Gilbert L. Dodds	Running
1944	Ann Curtis	Swimming
1945	Felix (Doc) Blanchard	Football
1946	Y. Arnold Tucker	Football
1947	John B. Kelly, Jr.	Rowing
1948	Robert B. Mathias	Track and field
1949	Richard T. Button	Figure skating

WOMEN'S A. A. U. TRACK AND FIELD CHAMPIONS, 1950

Outdoor

50 m.—Dolores Dwyer, German-American A. C., New York	0:06.7
100 m.—Jean Patton, Tenn. State College	0:13.1
200 m.—Nell Jackson, Tuskegee Institute	0:25
80 m. hurdles—Evelyn Lawler, Tuskegee	0:11.9
400-m. relay—Tuskegee (Catherine Johnson, Gladys Talley, Miss Lawler, Miss Jackson)	0:50.2
Baseball throw—Juanita Watson, Tuskegee	239 ft. 2¾ in.
Broad jump—Mabel Landry, C. Y. O. Club, Chicago	17 ft. 5¾ in.
High jump—Dorothy Chisholm, Tuskegee	4 ft. 9 in.
Discus—Frances Kaszubski, Sandy's Club, Cleveland	113 ft. 4¾ in.
Javelin—Amelia Bert, Little Rhody A. C., Providence	115 ft. 1¾ in.
Shot-put—Frances Kaszubski	39 ft. 3¾ in.
Team—Tuskegee Institute	91 pts.
Pentathlon—Stella Walsh, Cleveland	1,929 pts.

Indoor

50 yd.—Dolores Dwyer, German-American A. C.	0:06.5
100 yd.—Jean Patton, Tenn. State Coll.	0:11.8
220 yd.—Mae Faggs, Police Athletic League, New York	0:27
50-yd. low hurdles—Mrs. Nancy C. Phillips, German-American A. C.	0:07.7
440-yd. medley relay—Police Athletic League (Mae Faggs, Marie Taylor, Harriet Norris, Bessie Barfield)	0:53.6
440-yd. relay—P. A. L. (Misses Norris, Barfield, Taylor, Faggs)	0:51.8
Standing broad jump—Mrs. Nancy C. Phillips	8 ft. 3¾ in.
High jump—Marion Boos, P. A. L.	4 ft. 7 in.
8-lb. shot-put—Amelia Bert, Little Rhody A. C.	38 ft. ¾ in.
Basketball throw—Ottillie Barth, P. A. L.	101 ft. 9½ in.
Team—Police Athletic League, New York	41 pts.

BOXING

WHETHER it be called pugilism, prize fighting or boxing, there is no tracing "the Sweet Science" to any definite source. Tales of rivals exchanging blows for fun, fame or money go back to earliest recorded history and classical legend. There was a mixture of boxing and wrestling called the "pancratium" in the ancient Olympic Games and in such contests the rivals belabored one another with hands fortified with heavy leather wrappings that were sometimes studded with metal. More than one Olympic competitor lost his life at this brutal exercise.

There was little law or order in pugilism until Jack Broughton, one of the early champions of England, drew up a set of rules for the game in 1743. Broughton, called "the father of English boxing," also is credited with having invented boxing gloves. However, these gloves—or "mufflers" as they were called—were used only in teaching "the manly art of self-defense" or in training bouts. All professional

championship fights were contested with "bare knuckles" until 1892 when John L. Sullivan lost the heavyweight championship of the world to James J. Corbett in New Orleans in a bout in which both contestants wore regulation gloves.

The Broughton rules were superseded by the London Prize Ring Rules of 1838. The 8th Marquess of Queensberry, with the help of John G. Chambers, put forward the "Queensberry Rules" in 1866, a code that called for gloved contests. Amateurs took quickly to the Queensberry Rules, the professionals slowly.

There is no official international set of rules for boxing even today. Amateur organizations set rules for amateurs in different countries and professional rules set by boxing commissions vary even in different sections of the United States, but the variations are for the most part minor. A prize fighter doesn't have to change his style greatly to ply his trade anywhere in the world.

Boxing Statistics

Source: Nat Fleischer's *All-Time Ring Record Book*, published and copyrighted by The Ring Book Shop, Inc., Madison Square Garden, New York, N. Y.

Boxing's Biggest Gates

WF—Won on foul.	ND—No decision.	(1st)—First bout.	(2d)—Second bout.	(3d)—Third bout.		
Date	Winner, weight	Loser, weight	Rounds	Site	Receipts	Attendance
Sept. 22, 1927	Tunney (189½)—Dempsey (192½) (2d) . . .		10	Soldier Field, Chicago.	\$2,658,660	104,943
June 19, 1946	Louis (207)—Conn (187) (2d)		KO 8	Yankee Stadium, New York	1,925,564	45,266
Sept. 23, 1926	Tunney (189½)—Dempsey (190) (1st)		10	Sesquicentennial Stdm., Phila.	1,895,733	120,757
July 2, 1921	Dempsey (188)—Carpentier (172)		KO 4	Boyle's 30 Acres, Jersey City	1,789,238	80,000
Sept. 14, 1923	Dempsey (192½)—Firpo (216½)		KO 2	Polo Grounds, New York.	1,188,603*	82,000
July 21, 1927	Dempsey (194½)—Sharkey (196)		KO 7	Yankee Stadium, New York.	1,083,530*	75,000
June 22, 1938	Louis (198¾)—Schmeling (193) (2d)		KO 1	Yankee Stadium, New York.	1,015,012*	70,000
Sept. 24, 1935	Louis (199¾)—Max Baer (210½)		KO 4	Yankee Stadium, New York.	1,000,832*	88,150
June 25, 1948	Louis (213½)—Walcott (194¾) (2d)		KO 11	Yankee Stadium, New York.	841,739	42,667
June 12, 1930	Schmeling (188)—Sharkey (197) (1st) . . .		WF 4	Yankee Stadium, New York.	749,935	79,222
June 22, 1937	Louis (197½)—Braddock (197)		KO 8	Comiskey Park, Chicago.	715,470	45,500
July 26, 1928	Tunney (192)—Heeney (203½)		KO 11	Yankee Stadium, New York.	691,014	45,890
Sept. 29, 1941	Louis (202½)—Nova (202½)		KO 6	Polo Grounds, New York.	583,711	56,549
June 19, 1936	Schmeling (192)—Louis (198) (1st)		KO 12	Yankee Stadium, New York.	547,541	42,088
Sept. 11, 1924	Wills (217)—Firpo (224½)		12	Boyle's 30 Acres, Jersey City	509,135	70,000
July 16, 1926	Delaney (166½)—Berlenbach (174½) (3d) .		15	Ebbets Field, Brooklyn	461,789	49,186
July 23, 1923	Leonard (134)—Tendler (133½) (2d) . . .		15	Yankee Stadium, New York.	452,648	58,519
July 4, 1919	Dempsey (187)—Willard (245)		KO 3	Toledo, Ohio.	452,224	19,650
June 18, 1941	Louis (199½)—Conn (174) (1st)		KO 13	Polo Grounds, New York.	451,743	60,071
June 21, 1932	Sharkey (205)—Schmeling (188) (2d) . . .		15	Long Island City Bowl, N. Y.	432,365	61,863
June 14, 1934	Max Baer (209½)—Carnera (263¾)		KO 11	Long Island City Bowl, N. Y.	428,000	56,000
July 16, 1947	Graziano (154½)—Zale (159)		KO 6	Chicago Stadium	422,918	18,547
Feb. 27, 1929	Sharkey (192)—Stribling (182)		10	Flamingo Park, Miami Beach, Fla. . . .	405,000	40,000
July 12, 1923	Firpo (214)—Willard (242)		KO 8	Boyle's 30 Acres, Jersey City	390,837	80,000
May 12, 1923	Firpo (212)—McAuliffe (200)		KO 3	Yankee Stadium, New York.	385,040	31,000
	Willard (245)—Floyd Johnson (195) . . .		KO 11			
June 27, 1929	Schmeling (187)—Uzcudun (192½) (1st) .		15	Yankee Stadium, New York.	378,902	65,000
July 27, 1922	Leonard (134½)—Tendler (134½) (1st) .		ND 12	Boyle's 30 Acres, Jersey City	367,862	54,685
July 3, 1931	Schmeling (189)—Stribling (186½)		KO 15	Cleveland Stadium	349,415	37,396
Sept. 20, 1939	Louis (200)—Pastor (183) (2d)		KO 11	Briggs Stadium, Detroit.	347,870	33,868
Sept. 27, 1946	Zale (160)—Graziano (154)		KO 6	Yankee Stadium, New York.	342,497	39,827
Sept. 19, 1946	Louis (211½)—Mauriello (198½)		KO 1	Yankee Stadium, New York.	335,063	38,494
June 28, 1939	Louis (200½)—Galento (233¾)		KO 4	Yankee Stadium, New York.	333,308	34,852
June 25, 1935	Louis (196)—Carnera (260½)		KO 6	Yankee Stadium, New York.	328,655	62,000

* Includes income from other sources, such as motion pictures or radio, or both.

HISTORY OF WORLD HEAVYWEIGHT CHAMPIONSHIP FIGHTS

(Bouts in which title changed hands)

WF—Won on foul.

Date	Where held	Winner, weight, age	Loser, weight, age	Rounds	Referee
July 8, 1889	Richburg, Miss....	John L. Sullivan, 198 (30)...	Jake Kilrain, 195 (30).....	75	John Fitzpatrick
(Last bare-knuckle title fight)					
Sept. 7, 1892	New Orleans, La....	James J. Corbett, 178 (26)...	John L. Sullivan, 212 (33)...	21	Prof. John Duffy
March 17, 1897	Carson City, Nev....	Bob Fitzsimmons, 167 (34)...	James J. Corbett, 183 (30)...	KO 14	George Siler
June 9, 1899	Coney Island, N. Y....	*James J. Jeffries, 206 (24)...	Bob Fitzsimmons, 167 (37)...	KO 11	George Siler
Feb. 23, 1906	Los Angeles, N. Y....	†Tommy Burns, 180 (24)...	Marvin Hart, 188 (29).....	20	James J. Jeffries
Dec. 26, 1908	Sydney, N. S. W....	Jack Johnson, 196 (30).....	Tommy Burns, 176 (27)...	KO 14	Hugh McIntosh
July 4, 1910	Reno, Nev.....	Jack Johnson, 208 (31).....	James J. Jeffries, 227 (34)...	KO 15	Tex Rickard
(Jeffries came out of retirement in an effort to regain title)					
April 5, 1915	Havana, Cuba.....	Jess Willard, 230 (31).....	Jack Johnson, 205½ (37)...	KO 26	Jack Welch
July 4, 1919	Toledo, Ohio.....	Jack Dempsey, 187 (24).....	Jess Willard, 245 (35).....	KO 3	Ollie Pecord
Sept. 23, 1926	Philadelphia.....	†Gene Tunney, 189½ (28)...	Jack Dempsey, 190 (31)...	10	Pop Reilly
June 12, 1930	New York.....	Max Schmeling, 188 (24)...	Jack Sharkey, 197 (27)...	WF 4	Jim Crowley
June 21, 1932	Long Island City....	Jack Sharkey, 205 (29).....	Max Schmeling, 188 (26)...	15	Gunboat Smith
June 29, 1933	Long Island City....	Primo Carnera, 260½ (26)...	Jack Sharkey, 201 (30)...	KO 6	Arthur Donovan
June 14, 1934	Long Island City....	Max Baer, 209½ (25).....	Primo Carnera, 263½ (27)...	KO 11	Arthur Donovan
June 13, 1935	Long Island City....	Jim Braddock, 193½ (29)...	Max Baer, 209½ (26).....	15	Jack McAvoy
June 22, 1937	Chicago.....	Joe Louis, 197½ (23).....	Jim Braddock, 197 (31)...	KO 8	Tommy Thomas
(Louis retired on March 1, 1949. [See his complete record.]					
June 22, 1949	Chicago.....	(a)Ezzard Charles, 181½ (27)...	Joe Walcott, 195½ (35)...	15	Davey Miller
Sept. 27, 1950	New York.....	(b)Ezzard Charles, 184½ (29)...	Joe Louis, 218 (36).....	15	Mark Conn

* Lack of opposition caused Jeffries to retire in March 1905. He named Marvin Hart and Jack Root as the leading contenders and agreed to referee their fight at Reno, Nev., on July 3, 1905, with the stipulation that he would designate the winner the world champion. Hart, 190 (28), knocked out Root, 171 (29), in the twelfth round. † Burns round draw with Burns at Los Angeles on Nov. 28, 1906, with Jeffries as the referee. Burns, 180 (25), eliminated O'Brien, 167 (29), by defeating him in 20 rounds at Los Angeles, May 8, 1907. Charles Eytton was the referee. ‡ Tunney retired after his bout with Tom Heeney in New York on July 26, 1928. Tunney, 192 (30), knocked out Heeney, 203 (30½), in the eleventh round. Ed Forbes was the referee.

(a) Recognized by the National Boxing Association. (b) Charles gained undisputed possession of the title by beating Louis, who came out of retirement in an effort to regain the crown.

BARE-KNUCKLE HEAVYWEIGHT CHAMPIONS, 1719-1892

- 1719—Jim Figg
 1734—George Taylor
 1740—Jack Broughton
 1750—Jack Slack
 1760—Bill Stevens
 1761—George Meggs
 1765—Bill Darts
 1777—Harry Sellers
 1780—Jack Harris
 1785—Tom (Jackling) Johnson
 1790—Big Ben Brain
 1792—Daniel Mendoza
 1795—John Jackson (retired)
 1802—Jem Belcher
 1805—Henry Pearce (Game Chicken)
 1808—John Gully (declined title)
 1809—Tom Cribb received belt, not transferable, and cup.
 1824—Tom Spring received four cups; resigned title.
 1825—Jem Ward received belt, not transferable.
 1838—James (Deaf) Burke claimed title.
 1839—William Thompson (Bendigo) beat Burke; claimed championship; received belt from Jem Ward.
 1841—Nick Ward (Jem's brother) beat Ben Caunt, Feb. 2. In return match Caunt beat Nick Ward and received belt by subscription. It was transferable.
 1845—Thompson beat Caunt and got belt.
 1850—Bill Perry (The Tipton Slasher), after fight with Paddock, claimed title.
 1851—Harry Broome won title from Perry.
 1853—Perry claimed title when Broome forfeited £200 to him in a match; retired from ring on Aug. 13.
 1857—Tom Sayers beat Perry for £200 a side and new belt.
 1860—Sayers retired after 42-round draw with John C. Heenan (The Benicia Boy), leaving old belt open for competition.
 1860—Sam Hurst (The Stalybridge Infant) beat Paddock and received belt.
 1861—Jem Mace beat Hurst.
 1862—Mace beat Tom King for £200 a side and the belt.
 1862—King beat Mace and claimed belt. Subsequently gave it up. Declined to meet Mace again. Mace claimed belt.
 1863—King beat Heenan for £1,000 a side.
 1865—Joe Wormald beat Andrew Marsden for £200 a side and belt, which had been claimed by both. Belt was given to Wormald, who forfeited £120 to Mace.
 1866—Mace and Joe Goss fought draw with £200 a side and belt at stake.
 1867—Wormald received £200 forfeit from Ned O'Baldwin and claimed belt when O'Baldwin failed to appear at starting place.
 1867—Mace and O'Baldwin drew; £200 a side; title and belt in abeyance.
 1868—Wormald and O'Baldwin drew; £200 a side and title in America.
 1869—Mike McCool beat Tom Allen in America for world championship.
 1870—Mace beat Allen in America for world championship.
 1871—Mace and Joe Coburn fought draw for championship; £500 a side.
 1882—John L. Sullivan defeated Paddy Ryan for American championship only; 9 rounds, Mississippi City, Miss. (London Prize Ring rules).
 1885—Jem Smith beat Jack Davis for £100 a side and championship of England.
 1887—Jake Kilrain and Jem Smith drew; \$10,000 and Police Gazette Championship of World Belt.
 1889—John L. Sullivan beat Jake Kilrain, 75 rounds, Richburg, Miss., July 8, in last bare-knuckle championship fight; \$10,000 a side and Police Gazette Belt. (Sullivan claimed world title because of draw fought by Kilrain with Smith, England's titleholder.)

Other World Boxing Titleholders

LIGHT HEAVYWEIGHT CHAMPIONS

- 1903 —Jack Root, George Gardner
 1903-05—Bob Fitzsimmons
 1905-12—Philadelphia Jack O'Brien
 1912-16—Jack Dillon
 1916-20—Battling Levinsky
 1920-22—Georges Carpentier
 1923 —Battling Siki
 1923-25—Mike McTigue
 1925-26—Paul Berlenbach
 1926-27—Jack Delaney (a)
 1927 —Mike McTigue
 1927-29—Tommy Loughran (a)
 1930-34—Maxie Rosenbloom
 1934-35—Bob Olin
 1935-39—John Henry Lewis (a)
 1939 —Melio Bettina
 1939-41—Billy Conn (a)
 1941-48—Gus Lesnevich
 1948-50—Freddie Mills
 1950 —Joey Maxim

(a) Abandoned title.

MIDDLEWEIGHT CHAMPIONS

- 1867-72—Tom Chandler (bare knuckles).
 1872-81—Geo. Rourke (bare knuckles and gloves)
 1881-82—Mike Donovan (r)
 1884-91—Jack (Nonpareil) Dempsey
 1891-97—Bob Fitzsimmons
 1897-1907—Tommy Ryan, Kid McCoy, Philadelphia Jack O'Brien (t)
 1907-08—Stanley Ketchel
 1908 —Billy Papke
 1908-10—Stanley Ketchel
 1910-13—Billy Papke
 1913 —Frank Klaus
 1913-14—George Chip
 1914-17—Al McCoy
 1917-20—Mike O'Dowd
 1920-23—Johnny Wilson
 1923-26—Harry Greb
 1926 —Tiger Flowers
 1926-31—Mickey Walker (a)
 1931-32—Gorilla Jones (NBA); Ben Jeby (N. Y. Comm.)
 1932-37—Marcel Thil*
 1938 —Al Hostak and Solly Krieger (NBA)
 1939 —Solly Krieger, Al Hostak (NBA); Ceferino Garcia (N. Y. Comm.)
 1940 —Tony Zale (NBA); Ken Overlin (N. Y. Comm.)
 1941 —Tony Zale (NBA); Billy Soose (N. Y. Comm.)†
 1941-47—Tony Zale
 1947-48—Rocky Graziano
 1948 —Tony Zale
 1948-49—Marcel Cerdan
 1949 —Jake La Motta

(r) Retired. (t) Title claimants. (a) Abandoned title. * Thil's victory on a foul over Jones gave him a clear title claim, but the New York Commission withheld recognition. At various times during the 1932-37 period, championship recognition by the different bodies was given to the following: Ben Jeby, Lou Brouillard, Vince Dundee, Teddy Yarosz, Babe Risko, and Freddy Steele. Fred Apostol knocked out Thil in 10 rounds at the Polo Grounds, Sept. 23, 1937, but did not claim the title because of an agreement made with Thil. This was Thil's last fight. † Soose abandoned his claim to the title and Zale became the undisputed champion by defeating Georgie Abrams, who had beaten Soose three times.

WELTERWEIGHT CHAMPIONS

- 1892-94—Mysterious Billy Smith
 1894-96—Tommy Ryan
 1896 —Kid McCoy (o)
 1900 —Rube Ferns, Matty Matthews
 1901 —Rube Ferns

- 1901-06—Joe Walcott*
 1906-07—Honey Melody
 1907 —Mike (Twin) Sullivan†
 1915 —Ted Lewis†
 1919-22—Jack Britton
 1922-26—Mickey Walker
 1926-27—Pete Latzo
 1927-29—Joe Dundee
 1929-30—Jackie Fields
 1930 —Young Jack Thompson
 1930-31—Tommy Freeman
 1931 —Young Jack Thompson
 1931-32—Lou Brouillard
 1932-33—Jackie Fields
 1933 —Young Corbett 3d
 1933-34—Jimmy McLarnin
 1934 —Barney Ross
 1934-35—Jimmy McLarnin
 1935-38—Barney Ross
 1938-40—Henry Armstrong
 1940-41—Fritz Zivic
 1941-46—Freddie Cochrane
 1946-47—Marty Servo (r)
 1947 —Ray Robinson

(o) Outgrew class. * Walcott lost on foul to Dixie Kid in 1904, but decision was disputed. Dixie Kid went abroad, outgrew class, and Walcott was again recognized as the champion. † Sullivan outgrew class. The title was claimed by Jimmy Gardner, Jimmy Clabby, Ray Bronson, Clarence (Kid) Ferns, Mike Gibbons, Kid Graves, Mike Glover, Ted Lewis, and Jack Britton but no one received recognition as titleholder until Ted Lewis established his claim in 1915. ‡ Lewis outpointed Britton to gain undisputed possession of the crown on Aug. 31, 1915, and fought Britton a number of times over a period of four years with varying results until March 17, 1919, when Britton became the undisputed titleholder by knocking out Lewis. (r) Retired.

LIGHTWEIGHT CHAMPIONS

- 1885-96—Jack McAuliffe*
 1896-99—Kid Lavigne
 1899-02—Frank Erne
 1902-08—Joe Gans
 1908-10—Battling Nelson
 1910-12—Ad Wolgast
 1912-14—Willie Ritchie
 1914-17—Freddie Welsh
 1917-25—Benny Leonard (r)
 1925 —Jimmy Goodrich
 1941-42—Sammy Angott†
 1943 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott (NBA).
 1944 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott, Juan Zurita (NBA).
 1945 —Bob Montgomery (N. Y. Comm.), Juan Zurita, Ike Williams (NBA).
 1946-47—Bob Montgomery (N. Y. Comm.), Ike Williams (NBA).
 1947 —Ike Williams

* McAuliffe was champion of America, but never held the world crown, his battle for the world title with Jim Carney of England in 1887 resulting in a 14-round draw. (r) Retired. † Angott announced his retirement on Nov. 13, 1942, leaving the title vacant, but approximately two months later announced his comeback as challenger for the crown.

FEATHERWEIGHT CHAMPIONS

- 1889 —Freddy Bogan
 1890 —Billy Murphy
 1892-1900—George Dixon
 1900-01—Terry McGovern
 1901 —Young Corbet (o)
 1904-08—Brooklyn Tommy Sullivan
 1908-12—Abe Attell
 1912-23—Johnny Kilbane
 1923 —Eugene Ciriqui

Featherweight Champions—(Cont.)

- 1923-25—Johnny Dundee (o)
 1925-27—Louis (Kid) Kaplan (o)
 1927-28—Benny Bass
 1928 —Tony Canzoneri
 1928-29—Andre Routis
 1929-32—Battling Battalino (o)
 1932 —Tommy Paul (NBA); Kid Chocolate (N. Y. Comm.).
 1933-36—Freddie Miller
 1936-37—Petey Sarron
 1937-38—Henry Armstrong (a)
 1938-40—Joey Archibald
 1940-41—Harry Jeffra, Joey Archibald
 1941-42—Chalky Wright
 1942-48—Willie Pep
 1948-49—Sandy Saddler
 1949-50—Willie Pep
 1950 —Sandy Saddler

(o)Outgrew class. (a)Abandoned title.

FLYWEIGHT CHAMPIONS

- 1916-23—Jimmy Wilde
 1923-25—Pancho Villa*
 1925 —Frankie Genaro
 1925-27—Fidel La Barba (r)
 1927 —Corporal Izzy Schwartz†
 1930 —Midget Wolgast (N. Y. Comm.); Frankie Genaro (NBA).
 1931-32—Young Perez‡
 1932-35—Jackie Brown
 1935-38—Benny Lynch (r)
 1939 —Peter Kane (a)
 1943-47—Jackie Paterson (d)
 1947-50—Rinty Monaghan (r)
 1950 —Terry Allen
 1950 —Dado Marino

* Villa died in 1925, Genaro claiming title. † Schwartz was recognized as champion by N. Y. Comm., but conditions in the class became confused and were not straightened out until an elimination tourney was held in November, 1929. ‡ Perez was recognized as world's champion by the International Boxing Union of Europe. (r)Retired. (a)Abandoned title. (d)Deprived of title.

BANTAMWEIGHT CHAMPIONS

- 1890-92—George Dixon (o)
 1894-99—Jimmy Barry (r)
 1899-1900—Terry McGovern (o)
 1901 —Harry Harris (o)
 1902-03—Harry Forbes
 1903-04—Frankie Neil
 1904 —Joe Bowker (o)
 1905-07—Jimmy Walsh (o)
 1910-14—Johnny Coulon
 1914-17—Kid Williams

- 1917-20—Pete Herman
 1920-21—Joe Lynch
 1921 —Pete Herman
 1921-22—Johnny Buff
 1922-24—Joe Lynch
 1924 —Abe Goldstein
 1924-25—Eddie (Cannonball) Martin
 1925 —Charlie (Phil) Rosenberg (d)
 1929-35—Al Brown
 1935-36—Baltazar Sangchili
 1936 —Tony Marino
 1936-37—Sixto Escobar
 1937-38—Harry Jeffra
 1938-40—Sixto Escobar (r)
 1940-42—Lou Salica
 1942-47—Manuel Ortiz
 1947 —Harold Dade
 1947-50—Manuel Ortiz
 1950 —Vic Towel

(o)Outgrew class. (r)Retired. (d)Deprived of title when unable to make weight for championship bout.

Famous Firsts in Boxing

First modern ring champion: Jim Figg of England, 1719.

First set of boxing rules and first set of boxing gloves: Made by Jack Broughton, 1743.

First championship fight in America: Jacob Hyer beat Tom Beasley, 1816.

First glove fight: Between two English boxers, at Aix-la-Chapelle, France, October 8, 1818.

First contest in which motion pictures were filmed for general display to the public: Bob Fitzsimmons vs. Jim Corbett bout at Carson City, Nevada, 1897.

First million-dollar gate: Jack Dempsey vs. Georges Carpentier at Boyle's Thirty Acres, Jersey City, N. J., July 2, 1921 (\$1,789,238).

First round-by-round fight broadcast: Dempsey vs. Carpentier, 1921, J. Andrew White announcer.

First fight to draw over 100,000 people: Jack Dempsey vs. Gene Tunney at Philadelphia, 1926 (120,757).

First fight on television: Eric Boon vs. Arthur Danahar, Harringay Arena, London, England, February 23, 1939.

Neil Memorial Award Winners

The Edward J. Neil Memorial Plaque is given annually by the Boxing Writers' Association of New York to the individual who has done the most to further the cause of the sport. The winners:

- 1938 Jack Dempsey
 1939 Billy Conn
 1940 Henry Armstrong
 1941 Joe Louis
 1942 Sgt. Barney Ross
 1943 The boxers in all branches of the Armed Forces of our country.

- 1944 Lt. Comdr. Benny Leonard, U.S.M.S.
 1945 James J. Walker
 1946 Tony Zale
 1947 Gus Lesnevich
 1948 Ike Williams
 1949 Ezzard Charles

Ring Record of Joe Louis

1934

July 4	Jack Kracken, Chicago	KO 1
July 11	Willie Davis, Chicago	KO 3
July 29	Larry Udell, Chicago	KO 2
Aug. 13	Jack Kranz, Chicago	W 6
Aug. 27	Buck Everett, Chicago	KO 2
Sept. 11	Alex Borchuk, Detroit	KO 4
Sept. 25	Adolph Wiater, Chicago	W 10
Oct. 24	Art Sykes, Chicago	KO 8
Oct. 30	Jack O'Dowd, Detroit	KO 2
Nov. 14	Stanley Poreda, Chicago	KO 1
Nov. 30	Charley Massera, Chicago	KO 3
Dec. 14	Lee Ramage, Chicago	KO 8

1935

Jan. 4	Patsy Perroni, Detroit	W 10
Jan. 11	Hans Birkie, Pittsburgh	KO 10
Feb. 21	Lee Ramage, Los Angeles	KO 2
Mar. 8	Donald Barry, San Francisco	KO 3
Mar. 28	Natie Brown, Detroit	W 10
Apr. 13	Roy Lazer, Chicago	KO 3
Apr. 24	Biff Benton, Dayton	KO 2
Apr. 27	Roscoe Toles, Flint	KO 6
May 3	Willie Davis, Peoria	KO 2
May 5	Gene Stanton, Kalamazoo	KO 3
June 25	Primo Carnera, Yankee Stadium	KO 6
Aug. 7	King Levinsky, Chicago	KO 1
Sept. 24	Max Baer, Yankee Stadium	KO 4
Dec. 13	Paulino Uzcudun, Madison Square Garden	KO 4

1936

Jan. 17	Charley Retzlaff, Chicago	KO 1
June 19	Max Schmeling, Yankee Stadium	KO by 12
Aug. 17	Jack Sharkey, Yankee Stadium	KO 3
Sept. 22	Al Ettore, Philadelphia	KO 5
Oct. 9	Jorge Brescia, Madison Square Garden	KO 3
Dec. 14	Eddie Simms, Cleveland	KO 1

1937

Jan. 11	Stanley Ketchel, Buffalo	KO 2
Jan. 27	Bob Pastor, Madison Square Garden	W 10
Feb. 17	Natie Brown, Kansas City	KO 4
June 22	James J. Braddock, Chicago	KO 8
(Won heavyweight championship of the world)		

RECAPITULATION—bouts, 62; knockouts, 51; won decisions, 9; knocked out by, 1; lost, 1.

WORLD CHAMPIONSHIP FIGHTS IN 1950

Date	Winner	Loser	Title at stake	Where held	Rounds	Attendance
Jan. 16	Willie Pep	Charley Riley	Featherweight	St. Louis	KO 5	11,115
Jan. 24	*Joe Maxim	Freddie Mills	Light heavyweight	London	KO 10	18,000
Mar. 17	Willie Pep	Ray Famechon	Featherweight	New York	15	12,106
April 25	*Terry Allen	Honore Pratesi	Flyweight	London	15	—
May 31	*Vic Towel	Manuel Ortiz	Bantamweight	Johannesburg	15	27,000
July 12	Jake La Motta	Tiberio Mitri	Middleweight	New York	15	16,369
Aug. 1	*Dado Marino	Terry Allen	Flyweight	Honolulu	15	10,762
Aug. 9	Ray Robinson	Charley Fusari	Welterweight	Jersey City	15	22,854
Aug. 15	Ezzard Charles	Freddie Beshore	Heavyweight	Buffalo	KO 14	6,298
Sept. 8	*Sandy Saddler	Willie Pep	Featherweight	New York	KO 8	38,781
Sept. 13	Jake La Motta	Laurent Dauthuille	Middleweight	Detroit	KO 15	11,424
Sept. 27	†Ezzard Charles	Joe Louis	Heavyweight	New York	15	22,357

* Won championship. † Gained undisputed possession of title.

A. A. U. CHAMPIONS, 1950

112 lb.—Sherman Nelson, Philadelphia
118 lb.—Mickey Mars, Cleveland
126 lb.—Sammy Rodgers, Baltimore
135 lb.—George Justice, Philadelphia
147 lb.—Gil Turner, Philadelphia
160 lb.—Wes Echols, Atwater, Calif.
175 lb.—Eldridge Thompson, Washington, D. C.
Heavyweight—Norval Lee, Washington, D. C.
Team—Philadelphia

PROFESSIONAL WEIGHT LIMITS

	Ibs.
Flyweight	112
Bantamweight	118
Featherweight	126
Lightweight	135
Welterweight	147
Middleweight	160
Light heavyweight	175
Heavyweight	over 175

ICE HOCKEY

ICE HOCKEY, by birth and upbringing a Canadian game, is an offshoot of field hockey. Some historians state that the first ice hockey game was played in Montreal in December, 1879, between two teams composed almost exclusively of McGill University students, but others assert that Kingston, Ont., or Halifax, N. S., were scenes of earlier hockey games. In the Montreal game of 1879 there were fifteen players on a side and they used an assortment of crude sticks to keep the puck in motion. Early rules allowed nine men on a side but the number was reduced to seven in 1886 and finally reduced to six, the standard of today.

The first governing body of the sport was the Amateur Hockey Association of Canada, organized in 1887. In the winter of 1894-95 a group of college students from the United States visited Canada, saw hockey played, became enthused over the game and introduced it as a winter sport when they returned home. This was the

start of hockey in the United States. The first professional league was the International Hockey League that operated, strangely enough, not in Canada but in northern Michigan in 1904-06 and included as players such famous stars as Cyclone Taylor and Hod Stuart, later included in the Hockey Hall of Fame.

Until 1910, professionals and amateurs were allowed to play together on "mixed teams," but this arrangement ended with the formation of the first "big league," the National Hockey Association, in eastern Canada in 1910. The Pacific Coast League, to provide professional hockey in the West, was organized in 1911 with Seattle (and later other American cities) included in the circuit. The National Hockey League replaced the National Hockey Association in 1917. Boston, in 1924, was the first American city to join that circuit. The Stanley Cup, top trophy of hockey, was competed for by "mixed teams" from 1894 to 1910, thereafter by professionals.

Professional Statistics

Source: Stan Saplin, Hockey Department, Madison Square Garden.

STANLEY CUP WINNERS

Emblematic of world professional championship.

1894—Montreal A. A. A.	1908—Montreal Wanderers	1923—Ottawa Senators	1937—Detroit Red Wings
1895—Montreal Victorias	1909—Ottawa Senators	1924—Montreal Canadiens	1938—Chicago Black Hawks
1896—Winnipeg Victorias	1910—Montreal Wanderers	1925—Victoria Cougars	1939—Boston Bruins
1897—Montreal Victorias	1911—Ottawa Senators	1926—Montreal Maroons	1940—N. Y. Rangers
1898—Montreal Victorias	1912—Quebec Bulldogs	1927—Ottawa Senators	1941—Boston Bruins
1899—Montreal Victorias	1913—Quebec Bulldogs	1928—N. Y. Rangers	1942—Toronto Maple Leafs
1900—Montreal Shamrocks	1914—Toronto	1929—Boston Bruins	1943—Detroit Red Wings
1901—Winnipeg Victorias	1915—Vancouver Millionaires	1930—Montreal Canadiens	1944—Montreal Canadiens
1902—Montreal A. A. A.	1916—Montreal Canadiens	1931—Montreal Canadiens	1945—Toronto Maple Leafs
1903—Ottawa Silver Seven	1917—Seattle Metropolitans	1932—Toronto Maple Leafs	1946—Montreal Canadiens
1904—Ottawa Silver Seven	1918—Toronto Arenas	1933—N. Y. Rangers	1947—Toronto Maple Leafs
1905—Ottawa Silver Seven	1919—Series unfinished†	1934—Chicago Black Hawks	1948—Toronto Maple Leafs
1906—Montreal Wanderers	1920—Ottawa Senators	1935—Montreal Maroons	1949—Toronto Maple Leafs
1907—Kenora Thistles	1921—Ottawa Senators	1936—Detroit Red Wings	1950—Detroit Red Wings
1907—Mont. Wanderers*	1922—Toronto St. Patricks		

* March.

† The Montreal Canadiens and Seattle, P.C.H.L. champions, had played five games at Seattle, Wash., when an influenza epidemic (which took the life of Joe Hall of the Canadiens) caused the Department of Health to stop the series. Each team won two games, with one contest ending in a tie.

NATIONAL LEAGUE

Stanley Cup Play-offs, 1950

(Figures in parentheses indicate number of victories)

FINAL	Series A	SEMIFINALS
Series C		Series B
Detroit (4) vs. New York (3)	Detroit (4) vs. Toronto (3)	New York (4) vs. Montreal (1)
April 11—Detroit 4, New York 1	March 28—Toronto 5, Detroit 0	March 29—New York 3, Montreal 1
*April 13—New York 3, Detroit 1	March 30—Detroit 3, Toronto 1	April 1—New York 3, Montreal 2
*April 15—Detroit 4, New York 0	April 1—Toronto 2, Detroit 0	April 2—New York 4, Montreal 1
April 18—New York 4, Detroit 3†	April 4—Detroit 2, Toronto 1†	April 4—Montreal 3, New York 2†
April 20—New York 2, Detroit 1†	April 6—Toronto 2, Detroit 0	April 6—New York 3, Montreal 0
April 22—Detroit 5, New York 4	April 8—Detroit 4, Toronto 0	
April 23—Detroit 4, New York 3†	April 9—Detroit 1, Toronto 0†	

* Played at Toronto. † Overtime.

FINAL 1949-50 NATIONAL HOCKEY LEAGUE STANDING

(Regular season)

	Detroit	Montreal	Toronto	New York	Boston	Chicago						Goals	
	W. L. T.	W. L. T.	W. L. T.	W. L. T.	W. L. T.	W. L. T.	W.	L.	T.	Pts.	For	Agst	
Detroit	.....	5 3 6	8 5 1	7 5 2	8 3 3	9 3 2	37	19	14	88	229	164
Montreal	3 5 6	.....	6 4 4	7 5 2	5 4 5	8 4 2	29	22	19	77	172	150
Toronto	5 8 1	4 6 4	.....	8 4 2	7 5 2	7 4 3	31	27	12	74	176	173
New York	5 7 2	5 7 2	4 8 2	.....	5 5 4	9 4 1	28	31	11	67	170	189
Boston	3 8 3	4 5 5	5 7 2	5 5 4	.....	5 7 2	22	32	16	60	198	228
Chicago	3 9 2	4 8 2	4 7 3	4 9 1	7 5 2	.....	22	38	10	54	203	244

LEADING SCORERS IN NATIONAL LEAGUE

Regular Season

	Gms.	Gl's.	As.	Pts.	PIM
Ted Lindsay, Detroit.....	69	23	55	78	141
Sid Abel, Detroit.....	70	34	35	69	46
Gordon Howe, Detroit.....	70	35	33	68	69
Maurice Richard, Montreal.....	70	43	22	65	114
Paul Ronty, Boston.....	70	23	36	59	8
Ray Conacher, Chicago.....	70	25	31	56	16
Doug Bentley, Chicago.....	64	20	33	53	28
John Peirson, Boston.....	57	27	25	52	49
Metro Prystai, Chicago.....	65	29	22	51	31
Pep Guidolin, Chicago.....	70	17	34	51	42
Bert Olmstead, Chicago.....	70	20	29	49	40
Elmer Lach, Montreal.....	64	15	33	48	33
Bill Mosienko, Chicago.....	69	18	28	46	10
Phil Maloney, Boston.....	70	15	31	46	6
Sid Smith, Toronto.....	68	22	23	45	6
Billy Reay, Montreal.....	68	19	26	45	48
Edgar Laprade, New York.....	60	22	22	44	2
Ted Kennedy, Toronto.....	53	20	24	44	34
Tony Leswick, New York.....	69	19	25	44	85
Gaye Stewart, Chicago.....	70	24	19	43	43

Stanley Cup Play-offs

	Gms.	Gl's.	As.	Pts.	PIM
Pentti Lund, New York.....	12	6	5	11	0
Jerry Couture, Detroit.....	14	5	4	9	2
Don Raleigh, New York.....	12	4	5	9	4
George Gee, Detroit.....	14	3	6	9	0
Sid Abel, Detroit.....	14	6	2	8	2
Ted Lindsay, Detroit.....	13	4	4	8	12
Edgar Laprade, New York.....	12	3	5	8	4
Ed Slowinski, New York.....	12	2	6	8	4
Allan Stanley, New York.....	12	2	5	7	8

1949-50 ALL-STAR TEAMS

First Team

Second Team

G.....	Durnan, Montreal.....	Rayner, New York
D.....	Mortson, Toronto.....	Reise, Detroit
D.....	Reardon, Montreal.....	Kelly, Detroit
C.....	Abel, Detroit.....	Kennedy, Toronto
R.W.....	Richard, Montreal.....	Howe, Detroit
L.W.....	Lindsay, Detroit.....	Leswick, New York

1949-50 TROPHY WINNERS

Hart (most valuable player)—	Chuck Rayner, New York
Ross (leading scorer)—	Ted Lindsay, Detroit
Lady Byng (sportsmanship)—	Edgar Laprade, New York
Calder (outstanding rookie)—	Jack Gelineau, Boston
Vezina (leading goaltender)—	Bill Durnan, Montreal

1950 WORLD TITLE TOURNAMENT

Conducted by Ligue Internationale de Hockey sur Glace (International Ice Hockey Federation) at London, England.

Final Standing of the Teams

	W.	L.	T.	Pts.	For	Agst.
Canada.....	5	0	0	10	42	3
United States.....	4	1	0	8	29	20
Switzerland.....	3	2	0	6	31	30
Great Britain.....	2	3	0	4	14	32
Sweden.....	1	4	0	2	15	16
Norway.....	0	5	0	0	15	45

CONSOLATION STANDING

	W.	L.	T.	Pts.	For	Agst.
Belgium.....	2	0	0	4	15	3
Holland.....	1	1	0	2	6	5
France.....	0	2	0	0	2	15

HOME ATTENDANCE FIGURES

	1949-50	1948-49
Toronto Maple Leafs.....	476,603	417,409
Chicago Black Hawks.....	474,478	491,494
Montreal Canadiens.....	472,097	326,204
New York Rangers.....	447,332	366,278
Detroit Red Wings.....	442,372	402,153
Boston Bruins.....	390,377	406,227
	2,703,259*	2,409,765

* Record.

N. H. L. All-Star Game Record

1947-48—All-Stars 4, Toronto 3
1948-49—All-Stars 3, Toronto 1
1949-50—All-Stars 3, Toronto 1
1950-51—Detroit 7, All-Stars 1

CANADIAN CHAMPIONS, 1950

Allan Cup (senior amateur)—	Toronto Marlboros
Memorial Cup (junior amateur)—	Montreal Jr. Canadiens

HOCKEY'S HALL OF FAME

Kingston, Ontario

Donald H. Bain	Eddie Gerard	Howie Morenz	Arthur H. Ross
Hobey Baker	Mike Grant	Frank Nighbor	Eddie Shore
Russell Bowie	Silas Griffiths	Frank Patrick	Hod Stuart
Aubrey Clapper	E. C. (Newsy) Lalonde	Lester Patrick	Fred (Cyclone) Taylor
Allan Davidson	Aurel Joliat	Tom Phillips	Harry J. Trihey
Chas. G. Drinkwater	Joe Malone	Harvey Pulford	Georges Vezina
Charles Gardiner	Frank McGee	George Richardson	

AMERICAN LEAGUE

Final 1949-50 Standing of the Clubs
(Regular season)

EASTERN DIVISION

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Buffalo Bisons.....	32	29	9	73	226	208
Providence Reds.....	34	33	3	71	268	267
Springfield Indians.....	28	34	8	64	245	258
New Haven Ramblers.....	24	36	10	58	196	250
Hershey Bears.....	21	39	10	52	229	310

WESTERN DIVISION

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Cleveland Barons.....	45	15	10	100	357	230
*Indianapolis Caps.....	35	24	11	81	267	231
St. Louis Flyers.....	34	24	8	76	253	250
Pittsburgh Hornets.....	29	26	15	73	215	185
Cincinnati Mohawks....	19	37	14	52	185	257

* Won play-offs.

Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.	PIM
Les Douglas, Cleveland.....	67	32	68	100	27
Ab DeMarco, Buffalo.....	70	40	54	94	16
John Chad, Providence.....	70	36	54	90	4
Pete Leswick, Cleveland.....	64	36	50	86	18
Cliff Simpson, St. Louis.....	56	31	52	83	8
Jack Gordon, New Haven....	70	23	60	83	2

Champions

1941—Cleveland	1946—Buffalo
1942—Indianapolis	1947—Hershey
1943—Buffalo	1948—Cleveland
1944—Buffalo	1949—Providence
1945—Cleveland	1950—Indianapolis

PACIFIC COAST LEAGUE

Final 1949-50 Standing of the Clubs
(Regular season)

NORTHERN DIVISION

	W.	L.	T.	Pts.	Goals For	Goals Agst.
*New Westminster Royals.....	36	19	16	88	291	233
Tacoma Rockets.....	34	27	9	77	302	238
Vancouver Canucks.....	33	28	9	75	300	263
Seattle Ironmen.....	32	27	19	75	212	237
Portland Eagles.....	32	30	9	73	237	229
Victoria Cougars.....	22	42	6	50	218	307

SOUTHERN DIVISION

	W.	L.	T.	Pts.	Goals For	Goals Agst.
San Francisco Shamrocks.....	35	27	9	79	266	233
Los Angeles Monarchs.....	30	30	10	70	259	247
San Diego Skyhawks.....	27	33	10	64	211	236
Fresno Falcons.....	21	35	14	56	197	239
*Oakland Oaks.....	—	—	—	—	78	109

* Won play-offs. † Withdrew in mid-season.

Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.
Ronnie Rowe, Tacoma.....	68	47	44	91
Wingy Johnston, Tacoma.....	70	46	44	90
Mel Read, Tacoma.....	70	20	67	87
Bob Ballance, Vancouver.....	70	43	43	86
Alan Kuntz, Vancouver.....	70	37	46	83
Doug Adam, Tacoma.....	63	53	26	79
Larry Silvestri, San Francisco.....	69	34	45	79
Bob Love, New Westminster.....	71	34	45	79

INTERCOLLEGIATE CHAMPIONS, 1950

N.C.A.A.—Colorado College
Pentagonal League—Brown
Canadian—Montreal

UNITED STATES LEAGUE

Final 1949-50 Standing of the Clubs
(Regular season)

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Omaha Knights.....	41	22	7	89	313	240
*Minneapolis Millers.....	33	28	9	75	297	257
Kansas City Mohawks.....	30	28	12	72	293	267
St. Paul Saints.....	29	30	11	69	253	289
Tulsa Oilers.....	25	33	12	62	276	302
Louisville Blades.....	22	39	9	53	256	333

* Won play-offs.

Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.	PIM
Ray Powell, Kansas City.....	64	27	84	111	11
George Agar, Minneapolis.....	68	44	65	109	51
Len Haldorsen, Tulsa.....	69	38	61	99	25
Gordon Fashway, Kans. City.....	66	52	32	84	71
Ed Bruneteau, Omaha.....	69	43	40	83	16
Billy Warwick, Minneapolis..	70	35	46	81	47

Champions

1946—Kansas City	1948—Houston
1947—Kansas City	1949—St. Paul
1950—Minneapolis	

Amateur Ice Hockey

A. H. A. OF THE U. S.

Senior Open Champions, 1950

Eastern—Chatham (Ontario) Maroons
Western—Spokane (Wash.) Flyers

EASTERN LEAGUE

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Toledo Buckeyes.....	26	13	12	627	188	142
*New York Rovers.....	25	17	5	585	195	133
Grand Rapids Rockets.....	26	21	14	541	230	225
Boston Olympics.....	16	20	7	453	146	169
Milwaukee Clarks.....	19	24	8	451	191	210
Atlantic City Sea Gulls.....	14	31	2	319	122	193

* Won play-offs. Standing determined on percentage basis.

Leading Scorers

Gms. Gls. As. Pts.

	Gms.	Gls.	As.	Pts.
Val Delory, New York.....	47	36	37	73
John Horvath, Grand Rapids.....	53	25	38	63
Rosaire Benoit, Milwaukee.....	51	31	31	62
Stan McClellan, New York.....	46	31	29	60
John Flynn, New York.....	46	20	38	58
Bruce Mather, Boston.....	41	32	24	56
Herb Foster, Atlantic City.....	47	27	29	56

INTERNATIONAL LEAGUE

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Sarnia Sailors.....	25	11	3	55	219	136
Detroit Auto Club.....	19	15	7	45	170	139
*Chatham Maroons.....	18	19	3	39	152	148
Detroit Hetches.....	16	20	4	36	157	191
Windsor Ryncretes.....	10	25	5	25	152	236

* Won play-offs.

ATLANTIC LEAGUE

	W.	L.	T.	Pts.	Goals For	Goals Agst.
Springfield Flyers.....	11	5	2	24	117	68
*Lynn Pics.....	11	5	2	24	110	72
New York Metropolitans.....	6	11	1	13	71	99
New Haven Bears.....	5	12	1	11	67	126

* Won play-offs.

METROPOLITAN (NEW YORK) LEAGUE

	W.	L.	T.	Pts.	Goals For	Goals Agst.
*Manhattan Arrows.....	25	4	7	57	165	91
Sands Point Tigers.....	16	10	10	42	148	111
Brooklyn Torpedoes.....	11	16	9	31	107	128
Jamaica Hawks.....	4	26	6	14	61	151

* Won play-offs.

BASKETBALL

BASKETBALL may be unique in sports. It is one game concerning which it is safe to state when, where and how it originated. In the winter of 1891-92, Dr. James Naismith, an instructor in the Y.M.C.A. Training College (now Springfield College) at Springfield, Mass., deliberately invented the game of basketball in order to provide indoor exercise and competition for the students between the closing of the football season and the opening of the baseball season. He affixed peach baskets overhead on the walls at opposite ends of the gymnasium and, with an association (soccer) football, organized teams to play his new game in which the purpose was to toss the ball into one basket and prevent, as far as possible, the opponents from tossing the ball into the other basket. Fundamentally, the game is the same today, though there have been some improvements in equipment and many changes in the rules.

Because Dr. Naismith had eighteen available players when he invented the game, the first rule was: "There shall be nine players on each side." Later the number of players became optional, depending upon the size of the available court, but the five-player standard was adopted when the game spread over the country. United States soldiers introduced the game in Europe in World War I and, being taken up by foreign nations, it soon became a world-wide sport. An odd point is that, though it is still chiefly an indoor game in the United States, in other countries it flourishes almost entirely outdoors.

National Collegiate A. A. Champions

1939—Oregon	1945—Oklahoma A & M
1940—Indiana	1946—Oklahoma A & M
1941—Wisconsin	1947—Holy Cross
1942—Stanford	1948—Kentucky
1943—Wyoming	1949—Kentucky
1944—Utah	1950—C.C.N.Y.

National Invitation Champions

(Madison Square Garden Tourney)	
1938—Temple	1944—St. John's (Bklyn.)
1939—Long Island U.	1945—DePaul
1940—Colorado	1946—Kentucky
1941—Long Island U.	1947—Utah
1942—West Virginia	1948—St. Louis
1943—St. John's (Bklyn.)	1949—San Francisco
1950—C.C.N.Y.	

FINAL 1949-50 CONFERENCE STANDINGS

Eastern League

W.	L.	W.	L.
Princeton.....	11 1	Pennsylvania.....	4 8
Columbia.....	9 3	Harvard.....	3 9
Cornell.....	7 5	Dartmouth.....	1 11
Yale.....	7 5		

Western

Ohio State.....	11 1	Michigan.....	4 8
Wisconsin.....	9 3	Minnesota.....	4 8
Illinois.....	7 5	Northwestern.....	3 9
Indiana.....	7 5	Purdue.....	3 9
Iowa.....	6 6		

Missouri Valley

Bradley.....	11 1	Drake.....	5 7
St. Louis.....	8 4	Tulsa.....	3 9
Detroit.....	7 5	Wichita.....	1 11
Okl. A. & M.....	7 5		

OTHER CHAMPIONS, 1950

Southeastern Conference—Kentucky
 Southern Conference—No. Carolina State
 Skyline Six Conference—Brigham Young
 National Assn. (N.A.I.B.)—Indiana State
 National Catholic—Siena
 Colored A. A.—West Virginia State (regular season); North Carolina College, Durham (tournament)
 Mason-Dixon Conference—American University
 Rocky Mountain Conference—Montana State
 Midwest Conference—Beloit
 Canadian—Western Ontario

A. A. U. CHAMPIONS, 1950

Men—Phillips 66 Oilers, Bartlesville, Okla.
 Women—Nashville (Tenn.) Business College

SOUTHERN DIVISION

W.	L.	W.	L.
*U. C. L. A.....	10 2	Washington St.....	11 5
So. California.....	7 5	Washington.....	8 8
California.....	4 8	Oregon State.....	8 8
Stanford.....	3 9	Idaho.....	7 9
		Oregon.....	6 10

* Won conference title.

Big Seven

Kansas State.....	8 4	Colorado.....	6 6
Nebraska.....	8 4	Missouri.....	4 8
Kansas.....	8 4	Iowa State.....	2 10
Oklahoma.....	6 6		

Southwest

Arkansas.....	8 4	Texas.....	6 6
Baylor.....	8 4	Texas Christian... ..	5 7
So. Methodist.....	7 5	Rice.....	2 10
Texas A. & M.....	5 6		

N. B. A. All-Star Teams, 1950

FIRST TEAM—George Mikan, Jim Pollard, Minneapolis; Bob Davies, Rochester; Alex Groza, Indianapolis; Max Zaslofsky, Chicago.

SECOND TEAM—Al Cervi, Adolph Schayes, Syracuse; Ralph Beard, Indianapolis; Frank Brian, Anderson; Fred Schaus, Fort Wayne.

Argentina Takes World Title

Argentina beat the United States (Denver Chervolets), 64-50 in the final of the 1950 World Amateur Basketball Championship at Buenos Aires.

Professional Basketball

NATIONAL BASKETBALL ASSOCIATION

Source: National Basketball Association.

Final 1949-50 Standing of the Clubs

(Regular season)

EASTERN DIVISION

	Won	Lost	Pct.	Avg. pts. per game
*Syracuse Nationals.....	51	13	.797	84.8
New York Knickerbockers.....	40	26	.585	80.7
Washington Capitols.....	32	36	.471	76.5
Philadelphia Warriors.....	26	42	.382	73.3
Baltimore Bullets.....	25	43	.368	73.1
Boston Celtics.....	22	46	.324	79.7

* Won divisional play-offs.

CENTRAL DIVISION

*Minneapolis Lakers.....	51	17	.750	84.1
Rochester Royals.....	51	17	.750	82.4
†Fort Wayne Pistons.....	40	28	.588	79.3
Chicago Stags.....	40	28	.588	78.7
St. Louis Bombers.....	26	42	.382	73.7

* Won first-place play-off and divisional play-offs.

† Won third-place play-offs.

WESTERN DIVISION

Indianapolis Olympians.....	39	25	.609	85.8
*Anderson Duffy Packers.....	37	27	.578	87.3
Tri-Cities Blackhawks.....	29	35	.453	83.0
Sneboygan Redskins.....	22	40	.355	82.4
Waterloo Hawks.....	19	43	.306	79.4
Denver Nuggets.....	11	51	.177	77.7

* Won divisional play-offs.

SEMIFINAL PLAY-OFF, 1950

*April 5—Minneapolis 75, Anderson 50.

†April 6—Minneapolis 90, Anderson 71.

* At Minneapolis. †At Anderson.

CHAMPIONSHIP FINAL

*April 8—Minneapolis 68, Syracuse 66.
*April 9—Syracuse 91, Minneapolis 85.
†April 14—Minneapolis 91, Syracuse 77.
†April 16—Minneapolis 77, Syracuse 69.
*April 20—Syracuse 83, Minneapolis 76.
†April 23—Minneapolis 110, Syracuse 95.

* At Syracuse. † At St. Paul. ‡ At Minneapolis.

Final Standing of the Clubs

	Won	Lost	Pct.
Minneapolis Lakers.....	4	2	.667
Syracuse Nationals.....	2	4	.333

Leading Scorers

(Regular season)

	Gms.	Gls.	Fls.	Pts.
George Mikan, Minneapolis....	68	649	567	1865
Alex Groza, Indianapolis.....	64	521	454	1496
Frank Brian, Anderson.....	64	368	402	1138
Max Zaslofsky, Chicago.....	68	397	321	1115
Ed Macauley, St. Louis.....	67	351	379	1081
Adolph Schayes, Syracuse.....	64	343	376	1072
Carl Braun, New York.....	67	373	285	1031
Ken Sailors, Denver.....	57	329	329	987
Jim Pollard, Minneapolis.....	66	394	185	973
Joe Fulks, Fort Wayne.....	68	351	270	972
Ralph Beard, Indianapolis.....	68	336	293	965
Bob Davis, Rochester.....	64	317	261	895
Jack Nichols, Wash.-Tri-C.....	67	310	259	879
Ed Sadowski, Phila.-Balt.....	69	299	274	872

AMERICAN LEAGUE

Source: John J. O'Brien, President, American Basketball League.

Final 1949-50 Standing of the Clubs

(Regular season)

	Won	Lost	Pct.	Avg. pts. per game
*Scranton Miners.....	27	11	.711	73.76
Bridgeport Aer-A-Sols.....	22	13	.629	75.66
1928—Brooklyn Original Celtics	21	17	.553	80.53
N. Y. Harlem Yankees.....	20	17	.541	79.38
Paterson Crescents.....	17	18	.486	77.91
Hartford Hurricanes.....	11	26	.298	79.59
†Trenton Tigers.....	4	16	.200	80.00
‡Schenectady Packers.....	0	4	.000	65.50

* Won title play-offs.

‡ Suspended Nov. 23, 1949.

† Suspended Feb. 1, 1950.

Leading Scorers

(Regular season)

	Gms.	Gls.	Fls.	Pts.
E. Morgenthaler, Scranton.....	37	267	194	728
Hank De Zonie, New York.....	37	286	78	650
Bill Chanecka, Wilkes-Barre.....	37	233	141	607
Kuyler Ostrowski, Wilkes-Barre	38	223	152	598
Rabbit Walthour, New York....	35	207	119	533
George Kok, Bridgeport.....	35	201	123	525
Dick Holub, Paterson.....	34	145	213	503
John Bach, Hartford.....	37	164	171	499
George Crowe, New York.....	35	190	96	476
Irving Rothenberg, Paterson....	33	167	135	469

AMERICAN LEAGUE CHAMPIONS

1926—Cleveland Rosenblums
 1927—Brooklyn Original Celtics
 1928—Brooklyn Original Celtics
 1929—Cleveland Rosenblums
 1930—Cleveland Rosenblums
 1931—Brooklyn Visitations
 1932—No competition
 1933—No competition
 1934—Philadelphia Hebrews

1935—Brooklyn Visitations
 1936—Philadelphia Hebrews
 1937—Philadelphia Hebrews
 1938—Jersey Reds
 1939—New York Jewels
 1940—Philadelphia Sphas
 1941—Philadelphia Sphas
 1942—Wilmington
 1943—Philadelphia Sphas

1944—Wilmington Bombers
 1945—Philadelphia Sphas
 1946—Baltimore Bullets
 1947—Trenton Tigers
 1948—Wilkes-Barre Barons
 1949—Wilkes-Barre Barons
 1950—Scranton Miners

HANDBALL, 1950

National A.A.U. Champions

FOUR-WALL

Singles—Ken Schneider, Chicago
 Doubles—Frank Coyle-Bill Baier, Chicago

THREE-WALL

Singles—Lloyd J. Leinweber, Chicago
 Doubles—Lloyd J. Leinweber-Stuart H. Makinney, Chicago

ONE-WALL

Singles—Vic Hershkowitz, Brooklyn
 Doubles—Artie Blank-Joe Schwartz, Brooklyn

JUNIOR FOUR-WALL

Singles—Sol Newman, Buffalo, N. Y.
 Doubles—George DiRe-Jack Gordon, Chicago

LAWN TENNIS

LAWN TENNIS is a comparatively modern modification of the ancient game of court tennis. Major Walter Clopton Wingfield thought that something like court tennis might be played outdoors on lawns and in December, 1873, at Nantclwyd, Wales, he introduced his new game under the name of *Sphairistike* at a lawn party. The game was a success and spread rapidly, but the name was a total failure and almost immediately disappeared when all the players and spectators began to refer to the new game as "lawn tennis." In the early part of 1874 a young lady named Mary Ewing Outerbridge returned from Bermuda to New York, bringing with her the implements and necessary equipment of the new game that she had obtained from a British Army supply store in Bermuda. Miss Outerbridge and friends played the first game of lawn tennis in the United States on the grounds of the Staten Island

Cricket and Baseball Club in the spring of 1874.

For a few years the new game went along in haphazard fashion under varying rules. Tennis balls were of no standard size or texture. The nets were set at different heights up to 5 feet on the side and 4 feet in the middle. Some courts were marked out in hour-glass shape, narrow in the middle and wide at both ends. But about 1880 standard measurements for the court and standard equipment within definite limits became the rule. In 1881 the United States Lawn Tennis Association was formed and conducted the first national championship at Newport, R. I. The international matches for the Davis Cup began with a series between the British and United States players on the courts of the Longwood Cricket Club, Chestnut Hill, Mass., in 1900, with the home players winning.

Lawn Tennis Statistics

Source: The Official U.S.L.T.A. Yearbook and Tennis Guide.

DAVIS CUP CHALLENGE ROUND RESULTS

MEN

No matches in 1901, 1910, 1915-18, and 1940-45.

Year	Result	Where played	Year	Result	Where played
1900	United States 5, British Isles 0	Chestnut Hill	1926	United States 4, France 1	Philadelphia
1902	United States 3, British Isles 2	Brooklyn	1927	France 3, United States 2	Philadelphia
1903	British Isles 4, United States 1	Chestnut Hill	1928	France 4, United States 1	Paris
1904	British Isles 5, Belgium 0	Wimbledon	1929	France 3, United States 2	Paris
1905	British Isles 5, United States 0	Wimbledon	1930	France 4, United States 1	Paris
1906	British Isles 5, United States 0	Wimbledon	1931	France 3, Great Britain 2	Paris
1907	Australasia 3, British Isles 2	Wimbledon	1932	France 3, United States 2	Paris
1908	Australasia 3, United States 2	Melbourne	1933	Great Britain 3, France 2	Paris
1909	Australasia 5, United States 0	Sydney	1934	Great Britain 4, United States 1	Wimbledon
1911	Australasia 5, United States 0	Christchurch	1935	Great Britain 5, United States 0	Wimbledon
1912	British Isles 3, Australasia 2	Melbourne	1936	Great Britain 3, Australia 2	Wimbledon
1913	United States 3, British Isles 2	Wimbledon	1937	United States 4, Great Britain 1	Wimbledon
1914	Australasia 3, United States 2	Forest Hills	1938	United States 3, Australia 2	Philadelphia
1919	Australasia 4, British Isles 1	Sydney	1939	Australia 3, United States 2	Haverford
1920	United States 5, Australasia 0	Auckland	1946	United States 5, Australia 0	Melbourne
1921	United States 5, Japan 0	Forest Hills	1947	United States 4, Australia 1	Forest Hills
1922	United States 4, Australasia 1	Forest Hills	1948	United States 5, Australia 0	Forest Hills
1923	United States 4, Australasia 1	Forest Hills	1949	United States 4, Australia 1	Forest Hills
1924	United States 5, Australasia 0	Philadelphia	1950	Australia 4, United States 1	Forest Hills
1925	United States 5, France 0	Philadelphia			

WIGHTMAN CUP RECORD

WOMEN

Year	Result	Where played	Year	Result	Where played
1923	United States 7, England 0	Forest Hills	1935	United States 4, England 3	Forest Hills
1924	England 6, United States 1	Wimbledon	1936	United States 4, England 3	Wimbledon
1925	England 4, United States 3	Forest Hills	1937	United States 6, England 1	Forest Hills
1926	United States 4, England 3	Wimbledon	1938	United States 5, England 2	Wimbledon
1927	United States 5, England 2	Forest Hills	1939	United States 5, England 2	Forest Hills
1928	England 4, United States 3	Wimbledon	1940-45	No matches	
1929	United States 4, England 3	Forest Hills	1946	United States 7, England 0	Wimbledon
1930	England 4, United States 3	Wimbledon	1947	United States 7, England 0	Forest Hills
1931	United States 5, England 2	Forest Hills	1948	United States 6, England 1	Wimbledon
1932	United States 4, England 3	Wimbledon	1949	United States 7, England 0	Haverford
1933	United States 4, England 3	Forest Hills	1950	United States 7, England 0	Wimbledon
1934	United States 5, England 2	Wimbledon			

UNITED STATES CHAMPIONS

Men's Singles

1881 Richard D. Sears	1899 Malcolm D. Whitman	1917 R. Lindley Murray†	1934 Fred J. Perry
1882 Richard D. Sears	1900 Malcolm D. Whitman	1918 R. Lindley Murray	1935 Wilmer L. Allison
1883 Richard D. Sears	1901 William A. Larned	1919 William Johnston	1936 Fred J. Perry
1884 Richard D. Sears	1902 William A. Larned	1920 William T. Tilden, II	1937 J. Donald Budge
1885 Richard D. Sears	1903 Hugh L. Doherty	1921 William T. Tilden, II	1938 J. Donald Budge
1886 Richard D. Sears	1904 Holcombe Ward	1922 William T. Tilden, II	1939 Robert L. Riggs
1887 Richard D. Sears	1905 Beals C. Wright	1923 William T. Tilden, II	1940 Donald McNeill
1888 Henry W. Slocum, Jr.	1906 William J. Clothier	1924 William T. Tilden, II	1941 Robert L. Riggs
1889 Henry W. Slocum, Jr.	1907 William A. Larned	1925 William T. Tilden, II	1942 Frederick R. Schroeder, Jr.
1890 Oliver S. Campbell	1908 William A. Larned	1926 Jean Rene Lacoste	1943 Lt. (jg) Joseph R. Hunt
1891 Oliver S. Campbell	1909 William A. Larned	1927 Jean Rene Lacoste	1944 Sgt. Frank A. Parker
1892 Oliver S. Campbell	1910 William A. Larned	1928 Henri Cochet	1945 Sgt. Frank A. Parker
1893 Robert D. Wrenn	1911 William A. Larned	1929 William T. Tilden, II	1946 John A. Kramer
1894 Robert D. Wrenn	1912 Maurice E. McLoughlin*	1930 John H. Doeg	1947 John A. Kramer
1895 Fred H. Hovey	1913 Maurice E. McLoughlin	1931 H. Ellsworth Vines, Jr.	1948 Richard Gonzales
1896 Robert D. Wrenn	1914 R. N. Williams, II	1932 H. Ellsworth Vines, Jr.	1949 Richard Gonzales
1897 Robert D. Wrenn	1915 William Johnston	1933 Fred J. Perry	1950 Arthur Larsen
1898 Malcolm D. Whitman	1916 R. N. Williams, II		

* Challenge round abandoned. † Patriotic tourney.

Men's Doubles

1881 C. M. Clark—F. W. Taylor	1916 William Johnston—C. J. Griffin
1882 R. D. Sears—James Dwight	1917 F. B. Alexander—H. A. Throckmorton*
1883 R. D. Sears—James Dwight	1918 W. T. Tilden, II—Vincent Richards†
1884 R. D. Sears—James Dwight	1919 N. E. Brookes—G. L. Patterson
1885 R. D. Sears—J. S. Clark	1920 William Johnston—C. J. Griffin
1886 R. D. Sears—James Dwight	1921 W. T. Tilden, II—Vincent Richards
1887 R. D. Sears—James Dwight	1922 W. T. Tilden, II—Vincent Richards
1888 O. S. Campbell—V. G. Hall	1923 W. T. Tilden, II—B. I. C. Norton
1889 H. W. Slocum, Jr.—H. A. Taylor	1924 H. O. Kinsey—R. G. Kinsey
1890 V. G. Hall—Clarence Hobart	1925 Vincent Richards—R. N. Williams, II
1891 O. S. Campbell—R. P. Huntington, Jr.	1926 Vincent Richards—R. N. Williams, II
1892 O. S. Campbell—R. P. Huntington, Jr.	1927 W. T. Tilden, II—F. T. Hunter
1893 Clarence Hobart—F. H. Hovey	1928 G. M. Lott, Jr.—J. F. Hennessey
1894 Clarence Hobart—F. H. Hovey	1929 G. M. Lott, Jr.—J. H. Doeg
1895 M. G. Chace—R. D. Wrenn	1930 G. M. Lott, Jr.—J. H. Doeg
1896 C. B. Neel—S. R. Neel	1931 W. L. Allison—John Van Ryn
1897 L. E. Ware—G. P. Sheldon, Jr.	1932 H. E. Vines, Jr.—Keith Gledhill
1898 L. E. Ware—G. P. Sheldon, Jr.	1933 G. M. Lott, Jr.—L. R. Stofen
1899 Holcombe Ward—D. F. Davis	1934 G. M. Lott, Jr.—L. R. Stofen
1900 Holcombe Ward—D. F. Davis	1935 W. L. Allison—John Van Ryn
1901 Holcombe Ward—D. F. Davis	1936 J. D. Budge—C. G. Mako
1902 R. F. Doherty—H. L. Doherty	1937 Baron G. von Cramm—Henner Henkel
1903 R. F. Doherty—H. L. Doherty	1938 J. D. Budge—C. G. Mako
1904 Holcombe Ward—B. C. Wright	1939 A. K. Quist—J. E. Bromwich
1905 Holcombe Ward—B. C. Wright	1940 J. A. Kramer—F. R. Schroeder, Jr.
1906 Holcombe Ward—B. C. Wright	1941 J. A. Kramer—F. R. Schroeder, Jr.
1907 H. H. Hackett—F. B. Alexander	1942 Lt. (jg) Gardnar Mulloy—W. F. Talbert
1908 H. H. Hackett—F. B. Alexander	1943 J. A. Kramer—Cpl. F. A. Parker
1909 H. H. Hackett—F. B. Alexander	1944 Lt. Don McNeill—a/c Robert Falkenburg
1910 H. H. Hackett—F. B. Alexander	1945 Lt. Gardnar Mulloy—W. F. Talbert
1911 R. D. Little—G. F. Touchard	1946 Gardnar Mulloy—W. F. Talbert
1912 M. E. McLoughlin—T. C. Bundy	1947 J. A. Kramer—F. R. Schroeder, Jr.
1913 M. E. McLoughlin—T. C. Bundy	1948 Gardnar Mulloy—W. F. Talbert
1914 M. E. McLoughlin—T. C. Bundy	1949 John Bromwich—William Sidwell
1915 William Johnston—C. J. Griffin	1950 John Bromwich—Frank Sedgman

* Patriotic tournament. † Challenge round abandoned.

Pro Tennis Champions, 1950

WORLD INDOOR

Singles—Richard Gonzales, Los Angeles
Doubles—Don Budge—Richard Gonzales, Los Angeles

UNITED STATES OUTDOOR

Singles—Francisco Segura, Guayaquil, Ecuador
Doubles—Frank Kovacs, Oakland, Calif.—Welby Van Horn, Philadelphia

French Champions, 1950

Singles—Budge Patty, Los Angeles
Women's singles—Doris Hart, Jacksonville, Fla.
Doubles—William Talbert, New York—Tony Trabert, Cincinnati
Women's doubles—Shirley Fry, Akron, Ohio—Doris Hart
Mixed doubles—Barbara Scofield, San Francisco—Enrique Morea, Argentina

Canadian

Singles—Brendan Macken, Montreal
Women's singles—Doris Poppie, Spokane, Wash.

Women's Singles

1887 Ellen F. Hansell	1903 Elisabeth H. Moore	1919 Mrs. George W. Wightman	1935 Helen Jacobs
1888 Bertha L. Townsend	1904 May G. Sutton	1920 Mrs. Franklin I. Mallory	1936 Alice Marble
1889 Bertha L. Townsend	1905 Elisabeth H. Moore	1921 Mrs. Franklin I. Mallory	1937 Anita Lizana
1890 Ellen C. Roosevelt	1906 Helen Homans	1922 Mrs. Franklin I. Mallory	1938 Alice Marble
1891 Mabel E. Cahill	1907 Evelyn Sears	1923 Helen N. Wills	1939 Alice Marble
1892 Mabel E. Cahill	1908 Mrs. Maud Bargar-Wallach	1924 Helen N. Wills	1940 Alice Marble
1893 Aline M. Terry	1909 Hazel V. Hotchkiss	1925 Helen N. Wills	1941 Mrs. Sarah P. Cooke
1894 Helen R. Helwig	1910 Hazel V. Hotchkiss	1926 Mrs. Franklin I. Mallory	1942 Pauline M. Betz
1895 Juliette P. Atkinson	1911 Hazel V. Hotchkiss	1927 Helen N. Wills	1943 Pauline M. Betz
1896 Elisabeth H. Moore	1912 Mary K. Browne	1928 Helen N. Wills	1944 Pauline M. Betz
1897 Juliette P. Atkinson	1913 Mary K. Browne	1929 Helen N. Wills	1945 Mrs. Sarah P. Cooke
1898 Juliette P. Atkinson	1914 Mary K. Browne	1930 Betty Nuthall	1946 Pauline M. Betz
1899 Marion Jones	1915 Molla Bjurstedt	1931 Mrs. Helen W. Moody	1947 A. Louise Brough
1900 Myrtle McAteer	1916 Molla Bjurstedt	1932 Helen Jacobs	1948 Mrs. M. O. du Pont
1901 Elisabeth H. Moore	1917 Molla Bjurstedt*	1933 Helen Jacobs	1949 Mrs. M. O. du Pont
1902 Marion Jones	1918 Molla Bjurstedt†	1934 Helen Jacobs	1950 Mrs. M. O. du Pont

* Louise Hammond won patriotic tourney. † Challenge round abandoned.

Women's Doubles

1890 Ellen C. Roosevelt—Grace W. Roosevelt	1921 Mary K. Browne—Mrs. R. H. Williams
1891 Mabel E. Cahill—Mrs. W. F. Morgan	1922 Mrs. J. B. Jessup—Helen N. Wills
1892 Mabel E. Cahill—A. M. McKinley	1923 Kathleen McKane—Mrs. B. C. Covell
1893 Aline M. Terry—Hattie Butler	1924 Mrs. G. W. Wightman—Helen N. Wills
1894 Helen R. Helwig—J. P. Atkinson	1925 Mary K. Browne—Helen N. Wills
1895 Helen R. Helwig—J. P. Atkinson	1926 Elizabeth Ryan—Eleanor Goss
1896 E. H. Moore—J. P. Atkinson	1927 Mrs. L. A. Godfree—Ermyntude Harvey
1897 J. P. Atkinson—Kathleen Atkinson	1928 Mrs. G. W. Wightman—Helen N. Wills
1898 J. P. Atkinson—Kathleen Atkinson	1929 Mrs. Phoebe Watson—Mrs. L. R. C. Michell
1899 Jane W. Craven—Myrtle McAteer	1930 Betty Nuthall—Sarah Palfrey
1900 Edith Parker—Hallie Champin	1931 Betty Nuthall—Mrs. E. B. Whittingstall
1901 J. P. Atkinson—Myrtle McAteer	1932 Helen Jacobs—Sarah Palfrey
1902 J. P. Atkinson—Marion Jones	1933 Betty Nuthall—Freda James
1903 E. H. Moore—Carrie B. Neely	1934 Helen Jacobs—Sarah Palfrey
1904 May G. Sutton—Miriam Hall	1935 Helen Jacobs—Mrs. S. P. Fabyan
1905 Helen Homans—Carrie B. Neely	1936 Mrs. M. G. Van Ryn—Carolyn Babcock
1906 Mrs. L. S. Coe—Mrs. D. S. Platt	1937 Mrs. S. P. Fabyan—Alice Marble
1907 Marie Weimer—Carrie B. Neely	1938 Mrs. S. P. Fabyan—Alice Marble
1908 Evelyn Sears—Margaret Curtis	1939 Mrs. S. P. Fabyan—Alice Marble
1909 Hazel V. Hotchkiss—Edith E. Rotch	1940 Mrs. S. P. Fabyan—Alice Marble
1910 Hazel V. Hotchkiss—Edith E. Rotch	1941 Mrs. S. P. Cooke—Margaret Osborne
1911 Hazel V. Hotchkiss—Eleanora Sears	1942 A. Louise Brough—Margaret Osborne
1912 Dorothy Green—Mary K. Browne	1943 A. Louise Brough—Margaret Osborne
1913 Mary K. Browne—Mrs. R. H. Williams	1944 A. Louise Brough—Margaret Osborne
1914 Mary K. Browne—Mrs. R. H. Williams	1945 A. Louise Brough—Margaret Osborne
1915 Mrs. G. W. Wightman—Eleanora Sears	1946 A. Louise Brough—Margaret Osborne
1916 Molla Bjurstedt—Eleanora Sears	1947 A. Louise Brough—Margaret Osborne
1917 Molla Bjurstedt—Eleanora Sears	1948 A. Louise Brough—Mrs. Margaret O. du Pont
1918 Marion Zinderstein—Eleanor Goss	1949 A. Louise Brough—Mrs. Margaret O. du Pont
1919 Marion Zinderstein—Eleanor Goss	1950 A. Louise Brough—Mrs. Margaret O. du Pont
1920 Marion Zinderstein—Eleanor Goss	

OTHER UNITED STATES TENNIS CHAMPIONS, 1950

Singles

Veterans'—J. Gilbert Hall, New York
 Women veterans'—Mrs. Richard A. Buck, Boston
 Juniors'—Hamilton Richardson, Baton Rouge, La.
 Boys'—John Lesch, Los Angeles
 Interscholastic—Hamilton Richardson
 Girls'—Maureen Connolly, San Diego, Calif.

Doubles

Mixed—Mrs. Margaret O. du Pont, Wilmington, Del.—Kenneth McGregor, Australia
 Veterans'—Wilmer Allison, Austin, Texas—J. Gilbert Hall
 Women veterans'—Mrs. Hazel Hotchkiss Wightman, Pa.—Richard A. Buck, Boston
 Juniors'—Whitney Reed—Norm Peterson, Alameda, Calif.
 Boys'—Donald Pimley, San Leandro, Calif.—John Lesch
 Interscholastic—Gilmore Rothrock, New Cumberland, Pa.—Roger Young, Oyster Bay, N. Y.
 Girls'—Patricia Ann Zellmer—Maureen Connolly, San Diego
 Father-and-son—G. Diehl Mateer, Sr.—G. Diehl Mateer, Jr., San Diego, Cal.

Clay Courts

Singles—Herb Flam, Beverly Hills, Calif.
 Women's singles—Doris Hart, Jacksonville, Fla.
 Doubles—Art Larsen, San Leandro, Calif.—Herb Flam
 Women's doubles—Shirley Fry, Akron, Ohio—Doris Hart

Public Parks

Singles—Clyde Hippenstiel, San Bernardino, Calif.
 Women's singles—Mrs. Mary Arnold Prentiss, San Bernardino, Calif.
 Doubles—Bob Curtis—Clayton Benham, Denver
 Women's doubles—Mrs. Lucille Davidson, Lees Summit, Mo.—Mrs. Nora Prosser, Kansas City, Mo.

Indoor

Singles—Donald McNeill, Bellerose, N. Y.
 Women's singles—Nancy Chaffee, Ventura, Calif.
 Doubles—William Talbert, New York—Donald McNeill
 Women's doubles—Mrs. Richard A. Buck, Boston—Nancy Chaffee
 Mixed doubles—Budge Patty, Los Angeles—Nancy Chaffee

BRITISH LAWN TENNIS CHAMPIONS

Men's Singles

1877 S. W. Gore	1893 J. Pin	1909 A. W. Gore	1929 H. Cochet
1878 P. F. Hadow	1894 J. Pin	1910 A. F. Wilding	1930 W. T. Tilden, II
1879 J. T. Hartley	1895 W. Baddeley	1911 A. F. Wilding	1931 S. B. Wood
1880 J. T. Hartley	1896 H. S. Mahony	1912 A. F. Wilding	1932 H. E. Vines, Jr.
1881 W. Renshaw	1897 R. F. Doherty	1913 A. F. Wilding	1933 J. H. Crawford
1882 W. Renshaw	1898 R. F. Doherty	1914 N. E. Brookes	1934 F. J. Perry
1883 W. Renshaw	1899 R. F. Doherty	1919 G. L. Patterson	1935 F. J. Perry
1884 W. Renshaw	1900 R. F. Doherty	1920 W. T. Tilden, II	1936 F. J. Perry
1885 W. Renshaw	1901 A. W. Gore	1921 W. T. Tilden, II	1937 J. D. Budge
1886 W. Renshaw	1902 H. L. Doherty	1922 G. L. Patterson*	1938 J. D. Budge
1887 H. F. Lawford	1903 H. L. Doherty	1923 W. M. Johnston	1939 R. L. Riggs
1888 E. Renshaw	1904 H. L. Doherty	1924 J. Borotra	1946 Yvon Petra
1889 W. Renshaw	1905 H. L. Doherty	1925 R. Lacoste	1947 John A. Kramer
1890 W. J. Hamilton	1906 H. L. Doherty	1926 J. Borotra	1948 R. Falkenburg
1891 W. Baddeley	1907 N. E. Brookes	1927 H. Cochet	1949 F. R. Schroeder, Jr.
1892 W. Baddeley	1908 A. W. Gore	1928 R. Lacoste	1950 Budge Patty

* Challenge round abandoned.

Men's Doubles

1879 L. R. Erskine—H. F. Lawford	1899 R. F. Doherty—H. L. Doherty	1924 V. Richards—F. T. Hunter
1880 W. Renshaw—E. Renshaw	1900 R. F. Doherty—H. L. Doherty	1925 J. Borotra—R. Lacoste
1881 W. Renshaw—E. Renshaw	1901 R. F. Doherty—H. L. Doherty	1926 H. Cochet—J. Brugnon
1882 J. T. Hartley—R. T. Richardson	1902 S. H. Smith—F. L. Riseley	1927 W. T. Tilden, II—F. T. Hunter
1883 C. W. Grinstead—C. E. Welldon	1903 R. F. Doherty—H. L. Doherty	1928 H. Cochet—J. Brugnon
1884 W. Renshaw—E. Renshaw	1904 R. F. Doherty—H. L. Doherty	1929 W. Allison—J. Van Ryn
1885 W. Renshaw—E. Renshaw	1905 R. F. Doherty—H. L. Doherty	1930 W. Allison—J. Van Ryn
1886 W. Renshaw—E. Renshaw	1906 S. H. Smith—F. L. Riseley	1931 G. M. Lott—J. Van Ryn
1887 P. Bowes-Lyon—H. W. W. Wilberforce	1907 N. E. Brookes—A. F. Wilding	1932 J. Borotra—J. Brugnon
1888 W. Renshaw—E. Renshaw	1908 A. F. Wilding—M. J. G. Ritchie	1933 J. Borotra—J. Brugnon
1889 W. Renshaw—E. Renshaw	1909 A. W. Gore—H. R. Barrett	1934 G. M. Lott—L. R. Stofen
1890 J. L. Pim—F. O. Stoker	1910 A. F. Wilding—M. J. G. Ritchie	1935 J. H. Crawford—A. K. Quist
1891 W. Baddeley—H. Baddeley	1911 M. Decugis—A. H. Gobert	1936 C. R. D. Tuckey—G. P. Hughes
1892 H. S. Barlow—E. W. Lewis	1912 H. R. Barrett—C. P. Dixon	1937 J. D. Budge—C. Gene Mako
1893 J. L. Pim—F. O. Stoker	1913 H. R. Barrett—C. P. Dixon	1938 J. D. Budge—C. Gene Mako
1894 W. Baddeley—H. Baddeley	1914 N. E. Brookes—A. F. Wilding	1939 R. L. Riggs—E. T. Cooke
1895 W. Baddeley—H. Baddeley	1919 R. V. Thomas—P. O'Hara Wood	1946 J. A. Kramer—Tom Brown
1896 W. Baddeley—H. Baddeley	1920 R. N. Williams, II—C. S. Garland	1947 J. A. Kramer—R. Falkenburg
1897 R. F. Doherty—H. L. Doherty	1921 R. Lycett—M. Woosnam	1948 J. Bromwich—F. Sedgman
1898 R. F. Doherty—H. L. Doherty	1922 R. Lycett—J. O. Anderson*	1949 F. Parker—R. Gonzales
	1923 R. Lycett—L. A. Godfree	1950 J. Bromwich—A. Quist

* Challenge round abandoned.

Women's Singles

1884 M. Watson	1899 Mrs. Hillyard	1914 Mrs. L. Chambers	1931 Frl. C. Aussen
1885 M. Watson	1900 Mrs. Hillyard	1915-18 No tournaments	1932 Mrs. F. S. Moody
1886 Miss Bingley	1901 Mrs. Sterry	1919 Mlle. Lenglen	1933 Mrs. F. S. Moody
1887 L. Dod	1902 M. E. Robb	1920 Mlle. Lenglen	1934 D. E. Round
1888 L. Dod	1903 Miss Douglas	1921 Mlle. Lenglen	1935 Mrs. F. S. Moody
1889 Mrs. Hillyard	1904 Miss Douglas	1922 Mlle. Lenglen	1936 H. H. Jacobs
1890 L. Rice	1905 M. Sutton	1923 Mlle. Lenglen	1937 D. E. Round
1891 L. Dod	1906 Miss Douglas	1924 K. McKane	1938 Mrs. F. S. Moody
1892 L. Dod	1907 M. Sutton	1925 Mlle. Lenglen	1939 A. Marble
1893 L. Dod	1908 Mrs. Sterry	1926 Mrs. Godfree	1946 Pauline M. Betz
1894 Mrs. Hillyard	1909 D. Boothby	1927 H. Wills	1947 Margaret Osborne
1895 C. Cooper	1910 Mrs. L. Chambers	1928 H. Wills	1948 A. Louise Brough
1896 C. Cooper	1911 Mrs. L. Chambers	1929 H. Wills	1949 A. Louise Brough
1897 Mrs. Hillyard	1912 Mrs. Larcombe	1930 Mrs. F. S. Moody	1950 A. Louise Brough
1898 C. Cooper	1913 Mrs. L. Chambers		

Women's Doubles

1913 Mrs. McNair—Miss Boothby	1926 Miss Ryan—M. K. Browne	1935 K. E. Stammers—F. James
1914 Miss Ryan—A. M. Morton	1927 Miss Ryan—H. Wills	1936 K. E. Stammers—F. James
1915-18 No tournaments	1928 Mrs. H. Watson—P. Saunders	1937 Mme. S. Mathieu—A. M. Yorke
1919 Mlle. Lenglen—Miss Ryan	1929 Mrs. H. Watson—Mrs. Michell	1938 A. Marble—Mrs. S. P. Fabyan
1920 Mlle. Lenglen—Miss Ryan	1930 Miss Ryan—Mrs. F. S. Moody	1939 A. Marble—Mrs. S. P. Fabyan
1921 Mlle. Lenglen—Miss Ryan	1931 Mrs. Shepherd-Barron—Mrs. Mudford King	1946 A. L. Brough—M. Osborne
1922 Mlle. Lenglen—Miss Ryan	1932 Mlle. D. Metaxa—Mlle. J. Sigart	1947 Doris Hart—Mrs. Pat Todd
1923 Mlle. Lenglen—Miss Ryan	1933 Miss Ryan—Mme. Mathieu	1948 A. L. Brough—Mrs. M. O. du Pont
1924 Mrs. Wightman—H. Wills	1934 Miss Ryan—Mme. Mathieu	1949 A. L. Brough—Mrs. M. O. du Pont
1925 Mlle. Lenglen—Miss Ryan		1950 A. L. Brough—Mrs. M. O. du Pont

COURT TENNIS

Source: Allison Danzig, *The New York Times*.

National Champions

1892	Richard D. Sears, Boston A. A.	1928-29	Hewitt Morgan, R. and T. Club
1893	Fiske Warren, Boston A. A.	1930	Lord Aberdeen, England
1894-95	B. Spalding de Garmendia, R. and T. Club	1931-32	William C. Wright, Philadelphia
1896	Lawrence M. Stockton, Boston A. A.	1933	James H. Van Alen, R. and T. Club
1897	George R. Fearing, Jr., Boston A. A.	1934-37	Ogden Phipps, R. and T. Club
1898-99	Lawrence M. Stockton, Boston A. A.	1938	James H. Van Alen, R. and T. Club
1900	Eustace H. Miles, England	1939	Ogden Phipps, R. and T. Club
1901-04	Joshua Crane, Boston A. A.	1940	James H. Van Alen, R. and T. Club
1905	Charles E. Sands, R. and T. Club	1941	Alastair B. Martin, R. and T. Club
1906-17	Jay Gould, Philadelphia R. C.	1942-45	No tournaments
1918-19	No tournaments	1946	Robert Grant, III, R. and T. Club
1920-25	Jay Gould, Philadelphia R. C.	1947	E. M. Beals, Jr., Boston
1926	C. Suydam Cutting, R. and T. Club	1948-49	Ogden Phipps, Roslyn, N. Y.
1927	George Huband, England, and Chicago R. C.	1950	Alastair B. Martin, R. and T. Club

RACQUETS

Source: Allison Danzig, *The New York Times*.

National Champions

1890	B. Spalding de Garmendia, N. Y. Racquet Court	1916	S. G. Mortimer, R. and T. Club and Tuxedo
1891	B. Spalding de Garmendia, R. and T. Club	1917	C. C. Pell, R. and T. Club and Tuxedo
1892	J. S. Tooker, R. and T. Club, Boston A. A.	1918-19	No tournaments
1893-94	B. Spalding de Garmendia, R. and T. Club	1920-22	C. C. Pell, R. and T. Club and Tuxedo
1895	J. S. Tooker, R. and T. Club, Boston A. A.	1923	S. G. Mortimer, R. and T. Club and Tuxedo
1896-97	B. Spalding de Garmendia, R. and T. Club	1924-25	C. C. Pell, R. and T. Club and Tuxedo
1898	F. F. Rolland, Canada	1926	S. G. Mortimer, R. and T. Club and Tuxedo
1899	Quincy A. Shaw, Jr., Boston A. A.	1927-28	C. C. Pell, R. and T. Club and Tuxedo
1900	Eustace H. Miles, England	1929	H. D. Sheldon, R. and T. Club
1901	Quincy A. Shaw, Jr., Boston A. A.	1930	S. G. Mortimer, R. and T. Club and Tuxedo
1902	Clarence H. Mackay, R. and T. Club	1931-33	C. C. Pell, R. and T. Club and Tuxedo
1903	Payne Whitney, R. and T. Club	1934	E. M. Edwards, Philadelphia R. C.
1904	George H. Brooke, Philadelphia R. C.	1935	H. D. Sheldon, R. and T. Club
1905	Lawrence Waterbury, R. and T. Club	1936	E. M. Edwards, Philadelphia R. C.
1906	Percy D. Haughton, R. and T. Club	1937-39	Robert Grant, III, R. and T. Club
1907	Reginald Fincke, R. and T. Club	1940	Warren Ingersoll, III, Philadelphia R. C.
1908	Quincy A. Shaw, Jr., Boston T. and R. Club	1941	Robert Grant, III, R. and T. Club
1909	H. F. McCormick, University Club, Chicago	1942-45	No tournaments
1910	Quincy A. Shaw, Jr., Boston T. and R. Club	1946	Robert Grant, III, R. and T. Club
1911-12	Reginald Fincke, R. and T. Club	1947	J. Richards Leonard, R. and T. Club
1913-14	Lawrence Waterbury, R. and T. Club	1948-50	Robert Grant, III, R. and T. Club
1915	C. C. Pell, R. and T. Club and Tuxedo		

Tuxedo (N. Y.) Gold Racquet Winners

1904	—M. S. Barger, R. and T. Club	1929-30	—C. C. Pell, R. and T. Club and Tuxedo
1905-07	—C. H. Mackay, R. and T. Club	1931	—S. G. Mortimer, R. and T. Club and Tuxedo
1908	—J. G. Douglas, R. and T. Club	1932-33	—C. C. Pell, R. and T. Club and Tuxedo
1909	—H. F. McCormick, Chicago Univ. Club	1934	—J. R. Leonard, R. and T. Club
1910	—G. C. Clark, R. and T. Club	1935	—H. B. Sheldon, R. and T. Club
1911-12	—J. G. Douglas, R. and T. Club	1936	—C. C. Pell, R. and T. Club and Tuxedo
1913	—H. F. McCormick, Chicago Univ. Club	1937-39	—R. Grant, III, R. and T. Club
1914-17	—C. C. Pell, R. and T. Club and Tuxedo	1940	—J. R. Leonard, R. and T. Club
1918-20	No tournaments	1941	—R. Grant, III, R. and T. Club
1921-23	—C. C. Pell, R. and T. Club and Tuxedo	1942-45	No tournaments
1924	—S. G. Mortimer, R. and T. Club and Tuxedo	1946-47	—R. Grant, III, R. and T. Club
1925-27	—C. C. Pell, R. and T. Club and Tuxedo	1948	—J. R. Leonard, R. and T. Club
1928	—S. G. Mortimer, R. and T. Club and Tuxedo	1949-50	—R. Grant, III, R. and T. Club

OTHER CHAMPIONS, 1950

Court Tennis

World open—Pierre Etchebaster, New York
 British amateur—Alastair B. Martin, New York
 National doubles—Robert L. Gerry, Jr.-Alastair B. Martin,
 New York
 Tuxedo Gold Racquet—Robert L. Gerry, Jr.

Racquets

National doubles—Robert Grant, III and Clarence C. Pell, Jr.,
 New York
 Pell Cup—Robert Grant, III
 Canadian singles—Robert Grant, III
 Canadian doubles—Kenneth Wagg, London, England and
 Clarence C. Pell, Jr.

SQUASH RACQUETS

Source: United States Squash Racquets Association.

National Singles Champions

1907-08.....	John A. Miskey, Overbrook G. C.	1930.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.
1909.....	W. L. Freeland, Germantown C. C.	1931.....	J. Lawrence Pool, Harvard Club, New York
1910.....	John A. Miskey, Overbrook G. C.	1932.....	Beekman Pool, Harvard University
1911.....	F. S. White, Germantown C. C.	1933.....	Beekman Pool, Harvard Club, New York
1912.....	Constantine Hutchins, Boston A. A.	1934.....	Neil J. Sullivan, Germantown C. C.
1913.....	Mortimer L. Newhall, Germantown C. C.	1935.....	Donald Strachan, Philadelphia C. C.
1914.....	Constantine Hutchins, Boston T. and R. Club	1936.....	Germain G. Glidden, Harvard University
1915-17.....	Stanley W. Pearson, Germantown C. C.	1937-38.....	Germain G. Glidden, Harvard Club, New York
1918-19.....	No tournaments	1939.....	Donald Strachan, Merion C. C.
1920.....	Charles C. Peabody, Union B. C., Boston	1940.....	A. Willing Patterson, Philadelphia R. C.
1921-23.....	Stanley W. Pearson, Philadelphia R. C.	1941-42.....	Charles W. Brinton, Princeton University
1924.....	Gerald Roberts, Bath Club, London	1943-45.....	No tournaments
1925.....	W. Palmer Dixon, Harvard University	1946-47.....	Charles W. Brinton, Philadelphia
1926.....	W. Palmer Dixon, R. and T. Club, N. Y.	1948.....	Stanley W. Pearson, Jr., Philadelphia
1927.....	Myles P. Baker, Boston A. A.	1949.....	Hunter H. Lott, Jr., Merion C. C.
1928.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.	1950.....	Edward Hahn, Detroit
1929.....	J. Lawrence Pool, Harvard Club, New York		

Lapham International Trophy Record

Year	Result	Where played	Year	Result	Where played
1922	U. S. 11, Canada 2.....	Boston	1936	U. S. 10, Canada 2.....	Detroit
1923	U. S. 9, Canada 3.....	Toronto	1937	Canada 8, U. S. 7.....	Montreal
1924	U. S. 7½, England 6, Canada 1½..	Philadelphia	1938	U. S. 13, Canada 2.....	Boston
1925	U. S. 10, Canada 5.....	Montreal	1939	Canada 11, U. S. 4.....	Toronto
1926	U. S. 13, Canada 2.....	New York	1940	Canada 10, U. S. 5.....	Hartford
1927	England 17½, U. S. 16¼, Canada 11.....	Toronto	1941	U. S. 8, Canada 7.....	Toronto
1928	U. S. 14, Canada 1.....	Buffalo	1942	U. S. 13, Canada 2.....	Rochester, N. Y.
1929	Canada 8, U. S. 4.....	Hamilton	1943	Canada 7, U. S. 5.....	Montreal
1930	U. S. 8, Canada 1.....	Baltimore	1944	U. S. 12, Canada 3.....	New York
1931	Canada 6, U. S. 5.....	Quebec	1945	Canada 12, U. S. 3.....	Toronto
1932	U. S. 8, Canada 0.....	Hartford	1946	U. S. 13, Canada 2.....	Boston
1933	Canada 11, U. S. 4.....	Toronto	1947	Canada 9, U. S. 6.....	Hamilton
1934	U. S. 10, Canada 1.....	Cedarhurst, N. Y.	1948	U. S. 15, Canada 5.....	Hartford
1935	U. S. 11, Canada 4.....	Montreal	1949	Canada 7, U. S. 3.....	Quebec
			1950	U. S. 7, Canada 6.....	Providence

OTHER CHAMPIONS, 1950

Olfe-Noel Cup (women)—England
 Ladies Invitation—G. Diehl Mateer, Jr., Haverford College
 Sackett Trophy doubles—Hunter H. Lott, Jr.-G. Diehl Mateer, Jr.

National

Doubles—Hunter H. Lott, Jr.-G. Diehl Mateer, Jr.
 Intercollegiate—Ted Hands, Yale
 Professional—Edward Reid, Hartford, Conn.
 Veterans—George Waring, Boston

Men's team—Boston

Women's singles—Elizabeth Howe, New Haven, Conn.

Women's doubles—Mrs. William Rawls-Jane Austin, Philadelphia

Women veterans—Mrs. Ellwood J. Beatty, Jr., Philadelphia

Canadian

Singles—Edward Hahn, Detroit

Doubles—Doug Sinclair, Montreal-Joe Hahn, Detroit

SQUASH TENNIS

National Champions

Year	Winner and Club	Year	Winner and Club
1911-12.....	Alfred Stillman, Harvard	1926.....	Fillmore Van S. Hyde, Harvard
1913.....	George Whitney, Harvard	1927-29.....	Rowland B. Haines, Columbia
1914.....	Alfred Stillman, Harvard	1930-37.....	Harry F. Wolf, New York A. C.
1915-17.....	Eric S. Winston, Harvard	1938.....	Harry F. Wolf, Montclair
1918.....	Fillmore Van S. Hyde, Harvard	1939-40.....	Harry F. Wolf, New York A. C.
1919.....	John W. Appel, Jr., Harvard	1941.....	Joseph J. Lordi, New York A. C.
1920.....	Augusta J. Cordier, Yale	1942-45.....	No tournaments
1921.....	Fillmore Van S. Hyde, Harvard	1946.....	Frank R. Hanson, Columbia
1922.....	Thomas R. Coward, Yale	1947.....	Frederick B. Ryan, Jr., Yale
1923.....	R. Earl Fink, Crescent	1948-49.....	H. Robert Reeve, Bayside T. C.
1924.....	Fillmore Van S. Hyde, Harvard	1950.....	H. Robert Reeve, Nassau C. C.
1925.....	William Rand, Jr., Harvard		

TABLE TENNIS

World Champions

Year	Men's singles	Men's doubles	Year	Women's singles
1927-28	R. Jacobi, Hungary	Jacobi-Pecsi, Hungary	1927-31	M. Mednyansky, Hungary
1928-29	M. Mechlovits, Hungary	Liebster-Thum, Austria	1932	A. Sipos, Hungary
1929-30	Fred Perry, England	Barna-Szabados, Hungary	1933	A. Sipos, Hungary
1930-31	Viktor Barna, Hungary	Barna-Szabados, Hungary	1934	Marie Kettnerova, Czechoslovakia
1931-32	Miklos Szabados, Hungary	Barna-Szabados, Hungary	1935	Marie Kettnerova, Czechoslovakia
1932-33	Viktor Barna, Hungary	Barna-Szabados, Hungary	1936	Ruth Hughes Aarons, United States
1933-34	Viktor Barna, Hungary	Barna-Glancz, Hungary	1937	No tournament
1934-35	Viktor Barna, Hungary	Barna-Szabados, Hungary	1938	Trudi Pritzi, Austria
1935-36	Viktor Barna, Hungary	Barna-Szabados, Hungary	1939	Vlasia Depetrisova, Czechoslovakia
1936-37	Standa Kolar, Czechoslovakia	Blattner-McClure, United States	1947	Giselle Farkas, Hungary
1937-38	Richard Bergmann, Austria	Blattner-McClure, United States	1948	Giselle Farkas, Hungary
1938-39	Bohumil Vana, Czechoslovakia	McClure-Schiff, United States	1949	Giselle Farkas, Hungary
1939-40	Richard Bergmann, Austria	Bergmann, Austria-Barna, Hungary	1950	Angelica Roseanu, Rumania
1947-48	Verhulslav Vana, Czechoslovakia	Vana-Slar, Czechoslovakia		
1948-49	Richard Bergmann, England	Vana-Steipek, Czechoslovakia		
1949-50	John Leach, England	Tokar-Andreadis, Czechoslovakia		
1950-51	Richard Bergmann, England	Sido-Soos, Hungary		

Other World Champions, 1950

Women's doubles—Dora Beregi, England-Helen Elliot, Scotland
 Mixed doubles—Ferenc Sido-Giselle Farkas, Hungary
 Men's team (Swaythling Cup)—Czechoslovakia
 Women's team (Corbillion Cup)—Rumania

United States Champions

MEN'S SINGLES

1931	Marcus Schussheim, New York
1932	Coleman Clark, Chicago*
	Marcus Schussheim, New York*
1933	James M. Jacobson, New Rochelle, N. Y.*
	Sidney Heitner, New York*
1934	James McClure, Indianapolis*
	Sol Schiff, New York*
1935	A. Berenbaum, New York
1936	Viktor Barna, Hungary†
	Sol Schiff, New York†
1937	Laszlo Bellak, Hungary†
1938	Laszlo Bellak, Hungary
1939	James McClure, Indianapolis
1940	Louis Pagliaro, New York
1941	Louis Pagliaro, New York
1942	Louis Pagliaro, New York
1943	William Holzrichter, Chicago
1944	John Somaal, New York
1945	Richard Miles, New York
1946	Richard Miles, New York
1947	Richard Miles, New York
1948	Richard Miles, New York
1949	Richard Miles, New York
1950	John Leach, England

MEN'S DOUBLES

1932	James M. Jacobson-George T. Bacon, Jr., New Rochelle, N. Y.
1933	Paul Pearson-Edwin Lewis, Chicago*
	Ralph Langsam-Lloyd Waterson, New York*
1934	Samuel Silberman-Alan Lobell, New York*
	Sol Schiff, N. Y.-Manny Moskowitz, Rutherford, N. J.*
1935	A. Berenbaum, N. Y.-Edward Silverglade, Trenton, N. J.
1936	James McClure, Indianapolis-Robert Blattner, St. Louis†
	James M. Jacobson, New Rochelle, N. Y.-Sol Schiff, New York†
1937	Laszlo Bellak, Hungary-Standa Kolar, Czechoslovakia†
1938	Sol Schiff, New York-James McClure, Indianapolis
1939	Laszlo Bellak-Tibor Hazi, Hungary
1940	Sol Schiff, New York-James McClure, Indianapolis
1941	Edward Pinner-Cy Sussman, New York
1942	Edward Pinner-Cy Sussman, New York
1943	Laszlo Bellak, New York-Tibor Hazi, Philadelphia
1944	William Holzrichter, Chicago-Laszlo Bellak, N. Y.
1945	John Somaal, New York-Max Hersh, Detroit
1946	Edward Pinner-Cy Sussman, New York
1947	Douglas Cartland-Arnold Fetbrod, New York
1948	Tibor Hazi, Washington-John Somaal, New York
1949	Martin Reisman-Sol Schiff, New York
1950	John Leach-Jack Carrington, England

* Co-champions. At the time there were two national associations, each with its own champion. † Open championships. ‡ Closed championships.

WOMEN'S SINGLES

1933	Jessie Purves, Des Plaines, Ill.*
	Mrs. Fan Pockrose, New York*
1934	Ruth Hughes Aarons, Stamford, Conn.*
	Iris Little, Maplewood, N. J.*
1935	Ruth Hughes Aarons, Stamford, Conn.
1936	Ruth Hughes Aarons, Stamford, Conn.†
1937	Ruth Hughes Aarons, Stamford, Conn.†
1938	Emily Fuller, New York
1939	Emily Fuller, New York
1940	Sally Green, Indianapolis
1941	Sally Green, Indianapolis
1942	Sally Green, Indianapolis
1943	Sally Green, Indianapolis
1944	Sally Green, Indianapolis
1945	Davidia Hawthorn, New York
1946	Bernice Charney, New York
1947	Leah Thall, Columbus, Ohio
1948	Peggy McClean, Hollis, N. Y.
1949	Mrs. Leah Thall Neuberger, New York
1950	Mrs. Reba K. Monness, New York

* Co-champions. At the time there were two national associations, each with its own champion. † Open championships. ‡ Closed championship.

GOLF

IT MAY BE that golf originated in Holland—historians believe it did—but certainly Scotland fostered the game and is famous for it. In fact, in 1457 the Scottish Parliament, disturbed because football and golf had lured young Scots from the more soldierly exercise of archery, passed an ordinance that “futeball and golf be utterly cryit down and nocht usit”. James I and Charles I of the royal line of Stuarts were golf enthusiasts, whereby the game came to be known as “the royal and ancient game of golf”.

The golf balls used in the early games were leather covered and stuffed with feathers. Clubs of all kinds were fashioned by hand to suit individual players. The great step in spreading the game came with the change from the feather ball to the gutta-percha ball about 1850, and in 1860 formal competition began with the establishment of an annual tournament for the British open championship. There are records of “golf clubs” in the United

States as far back as colonial days but no proof of actual play before John Reid and some friends laid out six holes on the Reid lawn in Yonkers, N. Y., in 1888 and played there with the golf balls and clubs brought over from Scotland by Robert Lockhart. This group then formed the St. Andrews Golf Club of Yonkers, and golf was established in this country.

However, it remained a rather sedate and almost aristocratic pastime until a 20-year-old ex-caddy, Francis Ouimet of Boston, defeated two great British professionals, Harry Vardon and Ted Ray, in the United States Open championship at Brookline, Mass., in 1913. This feat put the game and Francis Ouimet on the front pages of the newspapers and stirred a wave of enthusiasm for the sport. The greatest feat so far in golf history was that of Robert Tyre Jones, Jr. of Atlanta, Ga., in winning the British Open, the British Amateur, the U. S. Open and the U. S. Amateur titles in one year, 1930.

Golf Statistics

Source: United States Golf Association.

UNITED STATES OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1895	Horace Rawlins.....	173	Newport	1922	Gene Sarazen.....	288	Skokie
1896	James Foulis.....	152	Shinnecock Hills	1923	R. T. Jones, Jr.(a,b).....	296	Inwood
1897	Foe Lloyd.....	162	Chicago	1924	Cyril Walker.....	297	Oakland Hills
1898*	Jed Herd.....	328	Myopia	1925	W. Macfarlane (a).....	291	Worcester
1899	Willie Smith.....	315	Baltimore	1926	R. T. Jones, Jr.(a,b).....	293	Scioto
1900	Harry Vardon.....	313	Chicago	1927	Tommy Armour (a).....	301	Oakmont
1901	Willie Anderson (a).....	331	Myopia	1928	Johnny Farrell (a).....	294	Olympia Fields
1902	L. Auchterlonie.....	307	Garden City	1929	R. T. Jones, Jr.(a,b).....	294	Winged Foot
1903	Willie Anderson (a).....	307	Baltusrol	1930	R. T. Jones, Jr.(b).....	287	Interlachen
1904	Willie Anderson.....	303	Glen View	1931	Billy Burke (a).....	292	Inverness
1905	Willie Anderson.....	314	Myopia	1932	Gene Sarazen.....	286	Fresh Meadow
1906	Alex Smith.....	295	Onwentsla	1933	John Goodman (b).....	287	North Shore
1907	Alex Ross.....	302	Philadelphia	1934	Olin Dutra.....	293	Merion
1908	Fred McLeod (a).....	322	Myopia	1935	Sam Parks, Jr.....	299	Oakmont
1909	George Sargent.....	290	Englewood	1936	Tony Manero.....	282	Baltusrol
1910	Alex Smith (a).....	298	Philadelphia	1937	Ralph Guldahl.....	281	Oakland Hills
1911	J. J. McDermott (a).....	307	Chicago	1938	Ralph Guldahl.....	284	Cherry Hills
1912	J. J. McDermott.....	294	Buffalo	1939	Byron Nelson (a).....	284	Philadelphia
1913	Francis Ouimet (a,b)....	304	Brookline	1940	W. Lawson Little, Jr.(a)..	287	Canterbury
1914	Walter Hagen.....	290	Midlothian	1941	Craig Wood.....	284	Colonial
1915	Jerome D. Travers (b)...	297	Baltusrol	1942-45	No tournaments†		
1916	Charles Evans, Jr.(b)...	286	Minikahda	1946	Lloyd Mangrum (a).....	284	Canterbury
1917-18	No tournaments†			1947	Lew Worsham (a).....	282	St. Louis
1919	Walter Hagen (a).....	301	Brae Burn	1948	Ben Hogan.....	276	Riviera
1920	Edward Ray.....	295	Inverness	1949	Cary Middlecoff.....	286	Medinah
1921	James M. Barnes.....	289	Columbia	1950	Ben Hogan (a).....	287	Merion

(a) Won play-off. (b) Amateur. * In 1898 competition was extended to 72 holes. † In 1917, Jock Hutchison, with a 292, won an Open Patriotic Tournament for the benefit of the American Red Cross at Whitemarsh Valley Country Club. ‡ In 1942, Ben Hogan, with a 271, won a Hale American National Open Tournament for the benefit of the Navy Relief Society and USO at Ridgemoor Country Club.

UNITED STATES AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1895	Charles B. Macdonald	Newport	1922	Jess W. Sweetser	Brookline
1896	H. J. Whigham	Shinnecock Hills	1923	Max R. Marston	Flossmoor
1897	H. J. Whigham	Chicago	1924	R. T. Jones, Jr.	Merion
1898	Findlay S. Douglas	Morris County	1925	R. T. Jones, Jr.	Oakmont
1899	H. M. Harriman	Onwentsia	1926	George Von Elm	Baltusrol
1900	Walter J. Travis	Garden City	1927	R. T. Jones, Jr.	Minikahda
1901	Walter J. Travis	Atlantic City	1928	R. T. Jones, Jr.	Brae Burn
1902	Louis N. James	Glen View	1929	H. R. Johnston	Del Monte
1903	Walter J. Travis	Nassau	1930	R. T. Jones, Jr.	Merion
1904	H. Chandler Egan	Baltusrol	1931	Francis Ouimet	Beverly
1905	H. Chandler Egan	Chicago	1932	C. R. Somerville	Baltimore
1906	Eben M. Byers	Englewood	1933	G. T. Dunlap, Jr.	Kenwood
1907	Jerome D. Travers	Euclid	1934	W. Lawson Little, Jr.	Brookline
1908	Jerome D. Travers	Garden City	1935	W. Lawson Little, Jr.	Cleveland
1909	Robert A. Gardner	Chicago	1936	John W. Fischer	Garden City
1910	W. C. Fownes, Jr.	Brookline	1937	John Goodman	Alderwood
1911	Harold H. Hilton	Apawamis	1938	Willie Turnesa	Oakmont
1912	Jerome D. Travers	Chicago	1939	Marvin H. Ward	North Shore
1913	Jerome D. Travers	Garden City	1940	R. D. Chapman	Winged Foot
1914	Francis Ouimet	Ekwanok	1941	Marvin H. Ward	Omaha
1915	Robert A. Gardner	Detroit	1946	Ted Bishop	Baltusrol
1916	Charles Evans, Jr.	Merion	1947	Robert Riegel	Del Monte
1919	S. D. Herron	Oakmont	1948	Willie Turnesa	Memphis
1920	Charles Evans, Jr.	Engineers'	1949	Charles Coe	Oak Hill
1921	Jesse P. Guilford	St. Louis	1950	Sam Urzetta	Minneapolis

UNITED STATES WOMEN CHAMPIONS

(Amateur)

Year	Winner	Where played	Year	Winner	Where played
1895	Mrs. C. S. Brown	Meadow Brook	1922	Glenna Collett	Greenbrier
1896	Beatrix Hoyt	Morris County	1923	Edith Cummings	Westchester-Biltmore
1897	Beatrix Hoyt	Essex (Mass.)	1924	Mrs. D. C. Hurd	Rhode Island
1898	Beatrix Hoyt	Ardley	1925	Glenna Collett	St. Louis
1899	Ruth Underhill	Philadelphia	1926	Mrs. G. H. Stetson	Merion
1900	Frances C. Griscom	Shinnecock Hills	1927	Mrs. M. B. Horn	Cherry Valley
1901	Genevieve Hecker	Baltusrol	1928	Glenna Collett	Hot Springs (Va.)
1902	Genevieve Hecker	Brookline	1929	Glenna Collett	Oakland Hills
1903	Bessie Anthony	Chicago	1930	Glenna Collett	Los Angeles
1904	G. M. Bishop	Merion	1931	Helen Hicks	Buffalo
1905	Pauline Mackay	Morris County	1932	Virginia Van Wie	Salem
1906	Harriet S. Curtis	Brae Burn	1933	Virginia Van Wie	Exmoor
1907	Margaret Curtis	Middlethorn	1934	Virginia Van Wie	Whitemarsh Valley
1908	K. C. Harley	Chevy Chase	1935	Mrs. E. H. Vane, Jr.	Interlachen
1909	D. I. Campbell	Merion	1936	Pamela Barton	Canoe Brook
1910	D. I. Campbell	Homewood	1937	Mrs. J. A. Page, Jr.	Memphis
1911	Margaret Curtis	Baltusrol	1938	Patty Berg	Westmoreland
1912	Margaret Curtis	Essex (Mass.)	1939	Betty Jameson	Wee Burn
1913	Gladys Ravenscroft	Wilmington	1940	Betty Jameson	Del Monte
1914	Mrs. H. A. Jackson	Nassau	1941	Mrs. Frank Newell	Brookline
1915	Mrs. C. H. Vanderbeck	Onwentsia	1946	Mrs. M. D. Zaharias	Tulsa
1916	Alexa Stirling	Belmont Springs	1947	Louise Suggs	Franklin Hills
1919	Alexa Stirling	Shawnee	1948	Grace Lenzyk	Pebble Beach
1920	Alexa Stirling	Mayfield	1949	Mrs. D. G. Porter	Merion
1921	Marion Hollins	Hollywood (N. J.)	1950	Beverly Hanson	East Lake

United States Public Links Champions

Year	Winner	Where played	Year	Winner	Where played
1922	Edmund R. Heid	Toledo, Ohio	1935	Frank Strafack	Indianapolis, Ind.
1923	Richard J. Walsh	Washington, D. C.	1936	B. Patrick Abbott	Farmingdale, N. Y.
1924	Joseph Coble	Dayton, Ohio	1937	Bruce N. McCormick	San Francisco, Calif.
1925	R. J. McAuliffe	Garden City, N. Y.	1938	Al Leach	Cleveland, Ohio
1926	Lester Bolstad	Buffalo, N. Y.	1939	Andrew Szwedko	Baltimore, Md.
1927	C. F. Kauffmann	Cleveland, Ohio	1940	Robert C. Clark	Detroit, Mich.
1928	C. F. Kauffmann	Philadelphia, Pa.	1941	William M. Welch	Spokane, Wash.
1929	C. F. Kauffmann	St. Louis, Mo.	1946	Smiley Quick	Denver, Colo.
1930	Robert E. Wingate	Jacksonville, Fla.	1947	Wilfred Crossley	Minneapolis, Minn.
1931	Charles Ferrara	St. Paul, Minn.	1948	Michael R. Ferentz	Atlanta, Ga.
1932	R. L. Miller	Louisville, Ky.	1949	Ken Towns	Los Angeles, Calif.
1933	Charles Ferrara	Portland, Ore.	1950	Stan Bielat	Louisville, Ky.
1934	David A. Mitchell	Pittsburgh, Pa.			

UNITED STATES P. G. A. CHAMPIONS

Source: The Professional Golfers' Association of America.

Year	Winner	Where played	Year	Winner	Where played
1916	Jim Barnes	Siwanoy, N. Y.	1934	Paul Runyan	Park Club, Buffalo
1917-18	No tournaments		1935	Johnny Revolta	Twin Hills, Okla.
1919	Jim Barnes	Engineers, L. I.	1936	Denny Shute	Pinehurst, N. C.
1920	Jock Hutchison	Flossmoor, Ill.	1937	Denny Shute	Pittsburgh, Pa.
1921	Walter Hagen	Inwood, L. I.	1938	Paul Runyan	Shawnee-on-Delaware, Pa.
1922	Gene Sarazen	Oakmont, Pa.	1939	Henry Picard	Pomonoak, L. I.
1923	Gene Sarazen	Pelham, N. Y.	1940	Byron Nelson	Hershey, Pa.
1924	Walter Hagen	French Lick, Ind.	1941	Victor Ghezzi	Denver, Colo.
1925	Walter Hagen	Olympia Fields, Ill.	1942	Sam Snead	Atlantic City, N. J.
1926	Walter Hagen	Sallsbury, L. I.	1943	No tournament	
1927	Walter Hagen	Dallas, Texas	1944	Bob Hamilton	Spokane, Wash.
1928	Leo Diegel	Baltimore, Md.	1945	Byron Nelson	Dayton, Ohio
1929	Leo Diegel	Hillcrest, Calif.	1946	Ben Hogan	Portland, Oreg.
1930	Tommy Armour	Fresh Meadow, L. I.	1947	Jim Ferrier	Plum Hollow, Mich.
1931	Tom Creavy	Wannamoisett, R. I.	1948	Ben Hogan	St. Louis, Mo.
1932	Olin Dutra	Keller Course, Minn.	1949	Sam Snead	Richmond, Va.
1933	Gene Sarazen	Blue Mound, Wis.	1950	Chandler Harper	Columbus, Ohio

BRITISH OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1860	W. Park	174	Prestwick	1902	Alex Herd	307	Hoylake
1861	Tom Morris, Sr.	163	Prestwick	1903	H. Vardon	300	Prestwick
1862	Tom Morris, Sr.	163	Prestwick	1904	Jack White	296	Sandwich
1863	W. Park	168	Prestwick	1905	James Braid	318	St. Andrews
1864	Tom Morris, Sr.	167	Prestwick	1906	James Braid	300	Muirfield
1865	A. L. Strath	162	Prestwick	1907	Arnaud Massy	312	Hoylake
1866	W. Park	169	Prestwick	1908	James Braid	291	Prestwick
1867	Tom Morris, Sr.	170	Prestwick	1909	J. H. Taylor	295	Deal
1868	Tom Morris, Jr.	170	Prestwick	1910	James Braid	299	St. Andrews
1869	Tom Morris, Jr.	154	Prestwick	1911	Harry Vardon (a)	303	Sandwich
1870	Tom Morris, Jr.	149	Prestwick	1912	E. Ray	295	Muirfield
1872	Tom Morris, Jr.	166	Prestwick	1913	J. H. Taylor	304	Hoylake
1873	Tom Kidd	179	St. Andrews	1914	Harry Vardon	306	Prestwick
1874	Mungo Park	159	Musselburgh	1915-19	No tournaments		
1875	Willie Park	166	Prestwick	1920	George Duncan	303	Deal
1876	Bob Martin	176	St. Andrews	1921	Jock Hutchison (a)	296	St. Andrews
1876	Jamie Anderson	160	Musselburgh	1922	Walter Hagen	300	Sandwich
1878	Jamie Anderson	157	Prestwick	1923	A. G. Havers	295	Troon
1879	Jamie Anderson	170	St. Andrews	1924	Walter Hagen	301	Hoylake
1880	Bob Ferguson	162	Musselburgh	1925	Jim Barnes	300	Prestwick
1881	Bob Ferguson	170	Prestwick	1926	R. T. Jones, Jr.	291	Royal Lytham, St. Annes
1882	Bob Ferguson	171	St. Andrews	1927	R. T. Jones, Jr.	285	St. Andrews
1883	W. L. Fernie (a)	159	Musselburgh	1928	Walter Hagen	292	Sandwich
1884	Jack Simpson	160	Prestwick	1929	Walter Hagen	292	Muirfield
1885	Bob Martin	171	St. Andrews	1930	R. T. Jones, Jr.	291	Hoylake
1886	D. L. Brown	157	Musselburgh	1931	T. D. Armour	296	Carnoustie
1887	W. Park, Jr.	161	Prestwick	1932	G. Sarazen	283	Princes, Sandwich
1888	Jack Burns	171	St. Andrews	1933	D. Shute (a)	292	St. Andrews
1889	W. Park, Jr.(a)	155	Musselburgh	1934	T. H. Cotton	283	Sandwich
1890	John Ball	164	Prestwick	1935	A. Perry	283	Muirfield
1891	Hugh Kirkaldy	166	St. Andrews	1936	A. H. Padgham	287	Royal Liverpool
1892*	H. H. Hilton	305	Muirfield	1937	T. H. Cotton	290	Carnoustie
1893	W. Auchterlonie	322	Prestwick	1938	R. A. Whitcombe	295	Sandwich
1894	J. H. Taylor	326	Sandwich	1939	R. Burton	290	St. Andrews
1895	J. H. Taylor	322	St. Andrews	1940-45	No tournaments		
1896	H. Vardon (a)	316	Muirfield	1946	Sam Snead	290	St. Andrews
1897	H. H. Hilton	314	Hoylake	1947	Fred Daly	293	Hoylake
1898	H. Vardon	307	Prestwick	1948	Henry Cotton	284	Gullane, Muirfield
1899	H. Vardon	310	Sandwich	1949	Bobby Locke (a)	283	Sandwich, Deal
1900	J. H. Taylor	309	St. Andrews	1950	Bobby Locke	279	Troon, Lochgreen
1901	James Braid	309	Muirfield				

(a) Won play-off. * In 1892 competition was extended to 72 holes.

Tam O'Shanter Champions, 1950

ALL AMERICAN		WORLD CHAMPIONSHIP TOURNEY	
	Score		
*Professional—Bobby Locke	282	*Professional—Henry Ransom	281
*Amateur—Frank Stranahan	291	Amateur—Frank Stranahan	289
Women's Open—Mrs. Mildred D. Zaharias	296	Women's professional—Mrs. Mildred D. Zaharias	293
		Women's amateur—Dot Kiely	315

BRITISH AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1885	A. F. MacFie.....	Hoylake	1914	J. L. C. Jenkins.....	Sandwich
1886	H. G. Hutchinson.....	St. Andrews	1915-19	No tournaments	
1887	H. G. Hutchinson.....	Hoylake	1920	Cyril J. H. Tolley.....	Muirfield
1888	John Ball.....	Prestwick	1921	W. I. Hunter.....	Hoylake
1889	J. E. Laidlay.....	St. Andrews	1922	E. W. E. Holderness.....	Prestwick
1890	John Ball.....	Hoylake	1923	R. H. Wethered.....	Deal
1891	J. E. Laidlay.....	St. Andrews	1924	E. W. E. Holderness.....	St. Andrews
1892	John Ball.....	Sandwich	1925	Robert Harris.....	Westward Ho
1893	Peter L. Anderson.....	Prestwick	1926	Jess W. Sweetser.....	Muirfield
1894	John Ball.....	Hoylake	1927	Dr. W. Tweddell.....	Hoylake
1895	L. M. B. Melville.....	St. Andrews	1928	T. P. Perkins.....	Prestwick
1896	F. G. Tait.....	Sandwich	1929	C. J. H. Tolley.....	Sandwich
1897	A. J. T. Allan.....	Muirfield	1930	R. T. Jones, Jr.....	St. Andrews
1898	F. G. Tait.....	Hoylake	1931	E. Martin Smith.....	Westward Ho
1899	John Ball.....	Prestwick	1932	J. De Forest.....	Muirfield
1900	H. H. Hilton.....	Sandwich	1933	Hon. M. Scott.....	Hoylake
1901	H. H. Hilton.....	St. Andrews	1934	W. Lawson Little, Jr.....	Prestwick
1902	C. Hutchings.....	Hoylake	1935	W. Lawson Little, Jr.....	Royal Lytham, St. Anne's
1903	R. Maxwell.....	Muirfield	1936	H. Thomson.....	St. Andrews
1904	W. J. Travls.....	Sandwich	1937	R. Sweeny, Jr.....	Sandwich
1905	A. G. Barry.....	Prestwick	1938	C. R. Yates.....	Troon
1906	James Robb.....	Hoylake	1939	A. Kyle.....	Hoylake
1907	John Ball.....	St. Andrews	1940-45	No tournaments	
1908	E. A. Lassen.....	Sandwich	1946	J. Bruen.....	Birkdale
1909	R. Maxwell.....	Muirfield	1947	Willie Turnesa.....	Carnoustie
1910	John Ball.....	Hoylake	1948	Frank Stranahan.....	Sandwich
1911	H. H. Hilton.....	Prestwick	1949	Max McCready.....	Portmarnock
1912	John Ball.....	Westward Ho	1950	Frank Stranahan.....	St. Andrews
1913	H. H. Hilton.....	St. Andrews			

Intercollegiate Golf Association of America Champions

Year	Individual	Team	Year	Individual	Team
1897	Louis P. Bayard, Jr., Princeton.....	Yale	1917-18	No tournaments	
1898*	John Reid, Jr., Yale.....	Harvard	1919	A. L. Walker, Jr., Columbia.....	Princeton
	James F. Curtis, Harvard.....	Yale	1920	Jess W. Sweetser, Yale.....	Princeton
1899	Percy Pyne, 2d, Princeton.....	Harvard	1921	J. Simpson Dean, Princeton.....	Dartmouth
1900	No tournament		1922	Pollack Boyd, Dartmouth.....	Princeton
1901	H. Lindsley, Harvard.....	Harvard	1923	Dexter Cummings, Yale.....	Princeton
1902*	Charles Hitchcock, Jr., Yale.....	Yale	1924	Dexter Cummings, Yale.....	Yale
	H. Chandler Egan, Harvard.....	Harvard	1925	G. Fred Lamprecht, Tulane.....	Yale
1903	F. O. Reinhart, Princeton.....	Harvard	1926	G. Fred Lamprecht, Tulane.....	Yale
1904	A. L. White, Harvard.....	Harvard	1927	Watts Gunn, Georgia Tech.....	Princeton
1905	Robert Abbott, Yale.....	Yale	1928	M. J. McCarthy, Jr., Georgetown.....	Princeton
1906	W. E. Clow, Jr., Yale.....	Yale	1929	Tom Aycock, Yale.....	Princeton
1907	Ellis Knowles, Yale.....	Yale	1930	George T. Dunlap, Jr., Princeton.....	Princeton
1908	H. H. Wilder, Harvard.....	Yale	1931	George T. Dunlap, Jr., Princeton.....	Yale
1909	Albert Seckel, Princeton.....	Yale	1932	John W. Fischer, Jr., Michigan.....	Yale
1910	Robert E. Hunter, Yale.....	Yale	1933	Walter Emery, Oklahoma.....	Yale
1911	George C. Stanley, Yale.....	Yale	1934	Charles R. Yates, Georgia Tech.....	Michigan
1912	F. C. Davison, Harvard.....	Yale	1935	Ed White, U. of Texas.....	Michigan
1913	Nathaniel Wheeler, Yale.....	Yale	1936	Charles Kocsis, Michigan.....	Yale
1914	Edward P. Allis, 3d, Harvard.....	Princeton	1937	Fred Haas, Jr., L. S. U.....	Princeton
1915	Francis R. Blossom, Yale.....	Yale	1938	John P. Burke, Georgetown.....	Stanford
1916	J. W. Hubbell, Harvard.....	Princeton			

* Two tournaments, in spring and fall.

National Collegiate Athletic Association Champions

Year	Individual	Team	Year	Individual	Team
1939	Vincent D'Antoni, Tulane.....	Stanford	1944	Louis Lick, Minnesota.....	Notre Dame
1940	F. Dixon Brooke, Virginia.....	Princeton*	1945	John Lorms, Ohio State.....	Ohio State
		L. S. U.*	1946	George Hamer, Georgia.....	Stanford
1941	Earl Stewart, L. S. U.....	Stanford	1947	Dave Barclay, Michigan.....	L. S. U.
1942	Frank Tatum, Jr., Stanford.....	Stanford*	1948	Bobby Harris, San Jose St.....	San Jose St.
		L. S. U.*	1949	Harvie Ward, North Carolina.....	No. Tex. St.
1943	Wallace Ulrich, Carleton.....	Yale	1950	Fred Wampler, Purdue.....	No. Tex. St.

* Tie.

Walker Cup Record

MEN (AMATEUR)

Year		Where played
1922	United States 8, Great Britain 4...	Southampton
1923	United States 6, Great Britain 5...	St. Andrews, Scotland
1924	United States 9, Great Britain 3...	Garden City G. C.
1926	United States 6, Great Britain 5...	St. Andrews, Scotland
1928	United States 11, Great Britain 1...	Wheaton, Ill.
1930	United States 10, Great Britain 2...	Royal St. George's
1932	United States 8, Great Britain 1...	The Country Club, Brookline, Mass.
1934	United States 9, Great Britain 2...	St. Andrews, Scotland
1936	United States 9, Great Britain 0...	Pine Valley G. C., Clementon, N. J.
1938	Great Britain 7, United States 4...	St. Andrews, Scotland
1947	United States 8, Great Britain 4...	St. Andrews
1949	United States 10, Great Britain 2...	Winged Foot

Curtis Cup Record

WOMEN

Year		Where played
1932	United States 5½, Great Britain 3½...	Wentworth, Eng.
1934	United States 6½, Great Britain 2½...	Chevy Chase
1936	United States 4½, Great Britain 4½...	Gleneagles
1938	United States 5½, Great Britain 3½...	Essex C. C.
1948	United States 6½, Great Britain 2½...	Birkdale
1950	United States 7½, Great Britain 1½...	Buffalo

AUGUSTA MASTERS' CHAMPIONS

Year and winner	Score	Year and winner	Score
1934—Horton Smith...	284	1942—Byron Nelson...	280
1935—Gene Sarazen*	282	1943-45—No tournaments	
1936—Horton Smith...	285	1946—Herman Keiser...	282
1937—Byron Nelson...	283	1947—Jimmy Demaret...	281
1938—Henry Picard...	285	1948—Claude Harmon...	279
1939—Ralph Guldahl...	279	1949—Sam Snead...	282
1940—Jimmy Demaret...	280	1950—Jimmy Demaret...	283
1941—Craig Wood...	280		

* Won play-off.

OTHER CHAMPIONS, 1950

Match Play

Canadian Amateur—Bill Mawhinney, Vancouver
 Dixie Amateur—Frank Stranahan, Toledo
 Eastern Interscholastic—Murray Vernon, Hotchkiss School
 French Open—Henri de Lamaze, France
 Great Lakes Amateur—Arthur Hoff, Hollywood, Ill.
 National Caddie—Mel Woelfling, Ashland, Ohio
 National Junior—Mason Rudolph, Clarksville, Tenn.
 National Left-handers'—Bob Buchanan, Indianapolis
 North-South Amateur—William C. Campbell, Huntington, W. Va.
 Southern Amateur—Dale Morey, Dallas, Texas
 Trans-Mississippi—Jim English, Red Oak, Iowa
 Western Amateur—Charles Coe, Oklahoma City

WOMEN

British Amateur—Vicomtesse de Saint Sauveur, France
 Canadian Open—Dot Kieley, Los Angeles
 National Intercollegiate—Betty Rowland, Rollins
 National Junior—Patricia Ann Lesser, Seattle
 North-South—Patricia O'Sullivan, Orange, Conn.
 Southern—Polly Riley, Fort Worth, Texas
 Texas Open—Beverly Hanson, Indio, Calif.
 Trans-Mississippi—Marjorie Lindsay, Decatur, Ill.
 Western Amateur—Polly Riley
 Western Open—Mrs. Mildred D. Zaharias, Chicago

Ryder Cup Record

MEN (PROFESSIONAL)

Year		Where played
1927	United States 9½, Great Britain 2½...	Worcester C. C.
1929	Great Britain 7, United States 5...	Moorlown, Eng.
1931	United States 9, Great Britain 3...	Scioto C. C.
1933	Great Britain 6½, United States 5½...	Southport, Eng.
1935	United States 9, Great Britain 3...	Ridgewood C. C.
1937	United States 8, Great Britain 4...	Southport, Eng.
1947	United States 11, Great Britain 1...	Portland, Oreg.
1949	United States 7, Great Britain 5...	Ganton, Eng.

P.G.A. TOURNEY WINNERS, 1950

	Score
Los Angeles Open—Sam Snead*	280
P.G.A. Seniors—Al Watrous	142
Crosby Pro-Amateur—Tie among Jack Burke, Jr., Dave Douglas, Smiley Quick, Sam Snead	214
Long Beach Open—Fred Haas, Jr.	268
Ben Hogan Open—Jimmy Demaret	269
Tucson Open—Chandler Harper	267
Texas Open—Sam Snead	265
Rio Grande Open—Jack Burke, Jr.	264
Houston Open—Cary Middlecoff	277
St. Petersburg Open—Jack Burke, Jr.	272
LaGorce Pro-Amateur—Ralph Blomquist	273
Miami Beach Open—Sam Snead	273
Seminole Pro-Amateur—Cary Middlecoff	207
Jacksonville Open—Sam Snead	279
Greensboro Open—Cary Middlecoff	269
Wilmington (N. C.) Open—E. J. Harrison	280
Augusta Masters'—Jimmy Demaret	283
Atlanta Open—Jimmy Demaret	270
Cavalier Specialists—Fred Hawkins	200
Greenbrier Pro-Amateur—Ben Hogan	259
Western Open—Sam Snead	282
Colonial National Invitation—Sam Snead	277
Fort Wayne Open—Lloyd Mangrum	271
U. S. Open—Ben Hogan*	287
Palm Beach Round-Robin—Lloyd Mangrum	37 pts.
P.G.A. Championship—Chandler Harper	274
Motor City Open—Lloyd Mangrum	274
Inverness Round-Robin—Sam Snead-Jim Ferrier	plus 18
St. Paul Open—Jim Ferrier*	276
Stout City Open—Jack Burke, Jr.	268
All American Open—Bobby Locke*	282
Tam O'Shanter World Championship—Henry Ransom*	281
Eastern Open—Lloyd Mangrum	279
Canadian Open—Jim Ferrier	271
Empire State Open—Skip Alexander*	279
Reading Open—Sam Snead	268
St. Louis Open—Cary Middlecoff*	270
Kansas City Open—Lloyd Mangrum	271
North-South Open—Sam Snead	275

* Won play-off.

Other Medal Play Champions, 1950

	Score
Dutch Open—Roberto de Vincenzo, Argentina	269
French International Open—Roberto de Vincenzo	287
Irish Open—Ossie Pickworth, Australia	279
Midwest Amateur—Dale Morey, Martinsville, Ind.	223
National Junior—Jim McCarthy, Tacoma, Wash.	303
National Senior—Alfred C. Ulmer, Jacksonville, Fla.	146
National Blind—Charlie Boswell, Birmingham, Ala.	220
National American Legion—Preston Hennies, Columbia, S. C.	306
Southern Intercollegiate—Arnold Palmer, Wake Forest	280

WOMEN

Eastern Amateur—Peggy Kirk, Findlay, Ohio	232
Eastern Open—Patty Berg, Chicago	217
National Open—Mrs. Mildred D. Zaharias	291
National Senior—Mrs. Robert B. Meckley, Washington, D. C.	167
Titleholders'—Mrs. Mildred D. Zaharias	298

TEAM

Duke of Devonshire Cup—United States	59½ pts.
Griscom Cup (women)—New York	38 pts.
Harding Cup (public links)—Los Angeles	217 pts.

NATIONAL COLLEGIATE A. A. CHAMPIONS, 1950

Source: Walter Byers, Executive Assistant, N.C.A.A.

Track and Field

100 yd.—Bob Boyd, Loyola (L. A.)	0:09.8
220 yd.—Charles Parker, Texas	0:21.5
440 yd.—George Rhoden, Morgan State	0:47.2
880 yd.—William Brown, Morgan State	1:51.2
1 mile—Don Gehrmann, Wisconsin	4:12.4
2 miles—Don McEwen, Michigan	9:01.9
120-yd. hurdles—Dick Attlesley, So. California	0:14
220-yd. hurdles—Bill Albans, North Carolina	0:23.8
Broad jump—Jerome Biffie, Denver	25 ft. 4 3/4 in.
High jump—Vern McGrew, Rice	6 ft. 7 in.
Discus—Dick Doyle, Montana	171 ft. 5 in.
Javelin—Franklin Held, Stanford	216 ft. 8 3/4 in.
Pole vault—Bobby Smith, San Diego State	14 ft. 2 3/4 in.
Shot-put—Jim Fuchs, Yale	56 ft. 11 1/4 in.
Team—Southern California	49 1/2 pts.

Swimming

50-yd. free—Edward Garst, Iowa	0:23.4
100-yd. free—Clarke Scholes, Mich. State	0:50.9
220-yd. free—John Blum, Yale	2:10
440-yd. free—Ralph Sala, Stanford	4:43.1
1,500-m. free—Jack Taylor, Ohio State	18:38.3
100-yd. back—William Sonner, Ohio State	0:59.1
150-yd. back—Jack Taylor	1:32.1
100-yd. breast—Robert Brawner, Princeton	0:59.9
200-yd. breast—Robert Brawner	2:14.3
150-yd. medley—Joe Verdeur, LaSalle (Phila.)	1:31.2
400-yd. relay—Yale (William Farnsworth, Larom Munson, Blum, Raymond Reid)	3:27.9
300-yd. medley relay—Yale (Albert Ratkiewicz, Robert Essert, Reid)	2:51.2
1-meter dive—Bruce Harlan, Ohio State	435 pts.
3-meter dive—Bruce Harlan	460.95 pts.
Team—Ohio State	64 pts.

Gymnastics

	Points
All-around—Joe Kotys, Kent State	1,066
Flying rings—Robert Schneider, Navy	281
Horizontal bar—Joe Kotys	285
Parallel bars—Joe Kotys	284
Rope climb—Leo Minotti, Syracuse	3.4s
Side horse—Eugene Rabbitt, Syracuse	284
Trampoline—Edsel Buchanan, Michigan	266
Tumbling—Irv Bedard, Illinois	289
Team—Illinois	26

Tennis

Singles—Herb Flam, U. C. L. A.
Doubles—Herb Flam—Gene Garrett, U. C. L. A.
Team—U. C. L. A.

Mackey Shoots Record Round

Lee Mackey, Jr., of Birmingham, Ala., shattered the National Open record for a single round by turning in a 64 on the first day of the 1950 title tourney at the Merion Golf Club, Ardmore, Pa. The previous mark of 65, held by Jimmy McHale of Philadelphia, was made in the 1947 championship at St. Louis.

Mackey's card:

Out—

Par 4 5 3 5 4 4 4 4 3—36

Mackey 4 5 3 4 4 4 4 3 3—33

In—

Par 4 4 4 3 4 4 4 3 4—34—70

Mackey 4 3 4 2 4 3 4 4 3—31—64

Boxing

125 lb.—Mac Martinez, San Jose State
130 lb.—Tad Thrash, Louisiana State
135 lb.—Everett Conley, Washington State
145 lb.—Leonard Walker, Idaho
155 lb.—Eli Thomas, Gonzaga
165 lb.—Herb Carlson, Idaho
175 lb.—Carl Maxey, Gonzaga
Heavyweight—Chuck Drazenovich, Penn State
Team—Idaho and Gonzaga (18 points each)
John S. LaRowe Trophy—Herb Carlson

Wrestling

121 lb.—Anthony Gazoni, Waynesburg
128 lb.—Joe Patacsil, Purdue
136 lb.—Lowell Lange, Cornell (Iowa)
145 lb.—Keith Young, Iowa State Teachers
155 lb.—Bill Nelson, Iowa State Teachers
165 lb.—Bill Smith, Iowa State Teachers
175 lb.—Joe Scarpello, Iowa
Heavyweight—Dick Hutton, Oklahoma A. & M.
Team—Iowa State Teachers

Fencing

Three-weapon team—Navy (67 1/2 pts.)
Foil—Robert Neilson, Columbia (31 pts.)
Epee—Tom Stuart, Navy (24 1/2 pts.)
Saber—Al Treves, Rutgers (27 pts.)

Golf

Individual—Fred Wampler, Purdue
Team—North Texas State

Ice Hockey

Colorado College beat Boston University, 13 to 4, in final.

Baseball

Texas beat Washington State, 3 to 0, in final.

1950 Basketball Final

(At Madison Square Garden, March 28)

C. C. N. Y. (71)

	G.	F.	P.
Dambrot, If.	7	1	15
Roman, rf.	6	0	12
Warner, c.	4	6	14
Roth, lg.	2	1	5
Mager	4	6	14
Galiber	0	0	0
Layne, rg.	3	5	11
Nadeff	0	0	0
Total	26	19	71

BRADLEY (68)

	G.	F.	P.
Grover, lf.	0	2	2
Schlichtman	0	0	0
Unruh, rf.	4	0	8
Behnke, c.	3	3	9
Kelly	0	0	0
Mann, lg.	2	5	9
Preece	6	0	12
D. Melchiorre	0	0	0
G. Melchiorre	7	2	16
Chianakas	5	1	11
Stowell	0	1	1
Total	27	14	68

Wall Gets 30th Ace

Arthur Wall, Jr., assistant golf professional at the Siwanoy Country Club, Bronxville, N. Y., sank his thirtieth ace with a 197-yard shot on the third hole of his home course on July 18, 1950. The perfect drive won Wall a \$400 pay-off on a one-year hole-in-one policy he had with Lloyds of London.

Negro Champions, 1950
UNITED GOLF ASSOCIATION

Amateur—Tex Guillery, Galveston, Texas
Women's amateur—Mrs. Ann Gregory, Gary, Ind.
Professional—Ted Rhodes, Los Angeles

EASTERN COLLEGE ATHLETIC CONFERENCE CHAMPIONS, 1950

Source: George L. Shlebler, Administrative Assistant, E.C.A.C.

TEAM

(Won-and-lost records in parentheses)

Baseball League—Army and Princeton (7-2)
Basketball League—Princeton (11-1)
Golf Association—Yale
Gymnastic League—Army and Syracuse (3-1 each)
Pentagonal Hockey League—Brown (6-2)
Swimming League—Yale (7-0)
Tennis Association—Princeton (7-0)
Wrestling Association—Syracuse

Fencing

Three-weapon—New York U. (73½ pts.)
Foil—N.Y.U. and Navy (27 each)
Epee—N.Y.U. and Navy (25½ each)
Saber—Army (26)

Assn. of Rowing Colleges

Varsity—Mass. Institute of Technology
Junior varsity—Princeton
Freshman—Harvard
Lightweight varsity—Yale
Lightweight junior varsity—Yale
Lightweight freshman—Yale

Track and Field

INDOOR

Heptagonal Games Assn.—Yale (51 19/20 pts.)
I.C.A.A.A.A.—Michigan State (21)
Metropolitan (N. Y.) Assn.—Manhattan (76½)
Met. (N. Y.) Assn. freshman—Manhattan (71½)

OUTDOOR

Heptagonal Games Assn.—Yale (62 1/6 pts.)
I.C.A.A.A.A.—Yale (42)
Metropolitan (N. Y.) Assn.—Manhattan (98½)
Met. (N. Y.) Assn. freshman—Manhattan (88½)
Middle Atlantic Assn.—LaSalle (37)

INDIVIDUAL

Fencing

(Won-and-lost records in parentheses)

Foil—Joe Vera, Harvard (5-0)
Epee—Tom Stuart, Navy (4½-½)
Saber—Al Treves, Rutgers (4-1)

INTERCOLLEGIATE A. A. A. TRACK AND FIELD CHAMPIONSHIPS, 1950

OUTDOOR

(At Triborough Stadium, New York)

00 yd.—Andy Stanfield, Seton Hall.....	0:09.6
20—Robert Carty, Manhattan.....	0:21.2
40—Charles Moore, Jr., Cornell.....	0:47.3
80—Philip Thigpen, Seton Hall.....	1:52.9
1 mile—George Wade, Yale.....	4:10.3
2 miles—Bob Black, Rhode Island State.....	9:16.7
20 hurdles—Jim Gehrdes, Penn State.....	0:14.4
20 hurdles—Jim Gehrdes.....	0:23.2
1 mile relay—New York U. (Richard Malocco, Robert Hatch, Hugo Malocco, Reginald Pearson).....	3:13.7
road jump—Edgar Davis, Princeton.....	24 ft. 7½ in.
high jump—Robert Jachens, Trinity.....	6 ft. 6½ in.
discus—Victor Frank, Yale.....	171 ft.
hammer—Gilbert Borjeson, Brown.....	169 ft. 5 in.
avelin—Albert Harnly, Albright.....	207 ft. ¼ in.
ole vault—Arthur Sherman, Rhode Island State, and George Appel, Yale (tie).....	13 ft. 6 in.
hot-put—Jim Fuchs, Yale.....	57 ft. 9¼ in.
eam—Yale.....	42 pts.

Gymnastics

Points

All-around—Wallace Hayes, Temple.....	1,007
Flying rings—Robert A. Williams, Army.....	277
Horizontal bar—William Willard, Temple.....	282
Parallel bars—Carl L. Brunson, Army.....	283
Rope climb—Leo Minotti, Syracuse.....	3.6s.
Side horse—Eugene Rabbitt, Syracuse.....	286
Tumbling—Rudolph Valentino, Penn State.....	274

Swimming

50-yd. free—John Irwin, Army.....	0:23.5
100-yd. free—Raymond Reid, Yale.....	0:51.1
220-yd. free—John Blum, Yale.....	2:10.4
440-yd. free—John Blum.....	4:46.9
1,500-m. free—Alvin Malthaner, Springfield.....	19:48.6
100-yd. back—Albert Ratkiewich, Yale.....	0:59.4
150-yd. back—Albert Ratkiewich.....	1:34.8
100-yd. breast—Robert Brawner, Princeton.....	1:00.1
200-yd. breast—Robert Brawner.....	2:14.2
150-yd. medley—Joe Verdeur, LaSalle.....	1:30.8
400-yd. relay—Yale (Hugh McMullen, Blum, Larry Munson, Reid).....	3:30.5
300-yd. medley relay—Yale (Ratkiewich, Robert Essert, Reid).....	2:51.5
1-m. dive—Roger Hadlich, Yale.....	129.48 pts.
3-m. dive—Roger Hadlich.....	135.3 pts.

Wrestling

121 lb.—Bob Gerbino, Syracuse
128 lb.—George Feuerbach, Lehigh
136 lb.—Wayne Smith, Navy
145 lb.—Jim Maurey, Penn State
155 lb.—Ken Hunte, Syracuse
165 lb.—Emil Perona, Rutgers
175 lb.—George Gebhardt, Syracuse
Heavyweight—Homer Barr, Penn State

EASTERN BOXING CHAMPIONS, 1950

Intercollegiate Association

125 lb.—Jim Huba, Syracuse
130 lb.—Al Hollingsworth, Virginia
135 lb.—Tim Curley, Syracuse
145 lb.—Ben Dolphin, Syracuse
155 lb.—Joe Miragliotta, Virginia
165 lb.—Jim Rollier, Syracuse
175 lb.—Pete Monfore, Army
Heavyweight—Chuck Drzenovich, Penn State
Team (Edward J. Neil Trophy)—Syracuse

INDOOR

(At Madison Square Garden and Squadron A Armory, New York)

60 yd.—Andy Stanfield, Seton Hall.....	0:06.7
600—Charles Moore, Jr., Cornell.....	1:12.2
1,000—Philip Thigpen, Seton Hall.....	2:15.7
1 mile—William Mack, Michigan State.....	4:11
2 miles—Richard Church, Syracuse.....	9:07.2
60 high hurdles—Jim Gehrdes, Penn State.....	0:07.3
1 mile relay—Seton Hall (Abe Evans, James Baucom, Charles Slade, Robert Carter).....	3:22
2-mile relay—Georgetown (Pat O'Brien, Dave Boland, Dave Smith, Joseph Deady).....	7:44.9
Broad jump—Fred Johnson, Mich. State.....	24 ft. 8½ in.
High jump—Victor Fritts, Penn State.....	6 ft. 4¼ in.
Pole vault—Neil King, Yale, and Dick Bastar, Army (tie).....	13 ft. 6 in.
Shot-put—Jim Fuchs, Yale.....	56 ft. 3¾ in.
35-lb. weight—Gilbert Borjeson, Brown.....	56 ft. 7¼ in.
Team—Michigan State.....	21 pts.

CONFERENCE TRACK AND FIELD CHAMPIONS, 1950

Heptagonal Games Association

OUTDOOR

(At New Haven, Conn.)

100 yd.—Ben Kreitzberg, Penn.	0:09.9
440—Charles Moore, Jr., Cornell	0:47.9
880—Robert Mullen, Penn.	1:53.6
1 mile—George Wade, Yale	4:17.1
2 miles—Richard Hart, Penn.	9:10.4
120 hurdles—Walter Ashbaugh, Cornell	0:14.7
220 hurdles—Meredith Gourdin, Cornell	0:24.7
440 relay—Army (Welch, Simpson, Tandler, Mastaglio)	0:43.3
1 mile relay—Yale (Sultz, MacDougal, Stoltmann, Swope)	3:19.4
Broad jump—Edgar Davis, Princeton	24 ft. 5½ in.
High jump—Richard Phillips, Brown, and Nelson Ehinger, Dartmouth (tie)	6 ft. 3 in.
Discus—Victor Frank, Yale	168 ft. 8½ in.
Hammer—Arthur Gardiner, Cornell	168 ft. 7½ in.
Javelin—John Thomas, Penn.	202 ft. 2½ in.
Pole vault—George Appel, Yale; Neil King, Yale, and Dick Bastar, Army (tie)	13 ft. 6 in.
Shot-put—Jim Fuchs, Yale	58 ft. 3 in.
Team—Yale	62½ pts.

INDOOR

(At Boston Garden and Briggs Cage, Cambridge)

50 yd.—George Ellis, Yale	0:05.6
600—Charles Moore, Jr., Cornell	1:12.7
1,000—Henry Stoltmann, Yale	2:14.2
1 mile—George Wade, Yale	4:15.4
2 miles—Richard Shea, Army	9:29.1
45 high hurdles—Hartley Shultz, Army	0:05.9
1 mile relay—Princeton (Rauch, Sable, Crouse, Howell)	3:22.3
2-mile relay—Yale (McDougal, Efinger, Stoltmann, Wade)	7:49.3
Broad jump—Winfield Scott, Army	23 ft. 4½ in.
High jump—Richard Phillips, Brown	6 ft. 3 in.
Pole vault—Neil King, Yale; Dick Bastar, Army; Carleton Jacob, Princeton; Ben Lawwill, Dartmouth (tie)	13 ft.
Shot-put—Jim Fuchs, Yale	56 ft. 3¾ in.
35-lb. weight—Gilbert Borjeson, Brown	56 ft. 6¼ in.
Team—Yale	51½ pts.

Metropolitan (N. Y.) Association

OUTDOOR

(At Triborough Stadium)

100 yd.—Ira Kaplan, N. Y. U.	0:09.6
220—Robert Carty, Manhattan	0:20.9
440—Hugo Malocco, N. Y. U.	0:48.6
880—Reginald Pearman, N. Y. U.	1:59.5
1 mile—James Cavanaugh, Manhattan	4:23.2
2 miles—Bill Lucas, Manhattan	9:42.6
120 hurdles—James Harrington, Manhattan	0:15.2
220 hurdles—Robert Hatch, N. Y. U.	0:24
1 mile relay—N. Y. U. (R. Malocco, Taylor, H. Malocco, Pearman)	3:21.3
Broad jump—Robert Carty	24 ft. 1½ in.
High jump—Jim Gillerist, Manhattan, and Charles Fields, C. C. N. Y. (tie)	6 ft. 2 in.
Discus—Stanley Lampert, N. Y. U.	144 ft. 10 in.
Hammer—Stephen Dillon, St. Francis	163 ft. 9½ in.
Javelin—Isaac Corino, N. Y. U.	168 ft. 1¾ in.
Pole vault—Ronald Lennox, N. Y. U.	12 ft. 4 in.
Shot-put—Stanley Lampert, N. Y. U.	54 ft. 1¼ in.
Team—Manhattan	98½ pts.

INDOOR

(At 102d Regiment Armory and South Field)

60 yd.—Ira Kaplan, N. Y. U.	0:06.5
600—Hugo Malocco, N. Y. U.	1:12.2
1,000—John Moran, Manhattan	2:17.7
1 mile—Larry Ellis, N. Y. U.	4:20.8
2 miles—Bill Lucas, Manhattan	9:34.2
60 high hurdles—James Harrington, Manhattan	0:08
1 mile relay—N. Y. U. (Payne, Hatch, R. Malocco, H. Malocco)	3:24.6
2-mile relay—Manhattan (Moran, Duffy, Cavanaugh, McNeal)	8:04.2
Broad jump—Robert Carty, Manhattan	23 ft.
High jump—Arnold Webb, Brooklyn Coll.	6 ft. 3 in.
Pole vault—Paul Paetow, Columbia; Richard Lynn and Ronald Lennox, N. Y. U. (tie)	12 ft.
Shot-put—Stanley Lampert, N. Y. U.	52 ft. 4¾ in.
35-lb. weight—Stephen Dillon, St. Francis	58 ft. 9¾ in.
Team—Manhattan	76½ pts.

Western

OUTDOOR

(At Evanston, Ill.)

100 yd.—Charles Peters, Indiana	0:09.6
220—Charles Peters	0:21.2
440—Leroy Collins, Wisconsin	0:49.1
880—Don Gehrmann, Wisconsin	1:52
1 mile—Don Gehrmann	4:13
2 miles—Don McEwen, Michigan	9:13
120 hurdles—Russ Merkel, Iowa	0:14.4
220 hurdles—Don Hoover, Michigan	0:23
1 mile relay—Wisconsin (Collins, Meyers, Butler, Gehrmann)	3:20.9
Broad jump—Jim Holland, Northwestern	25 ft. 1¼ in.
High jump—Jim Horning, Minnesota	6 ft. 5½ in.
Discus—Byrl Thompson, Minnesota	171 ft. 5 in.
Pole vault—Don Laz, Illinois	14 ft.
Shot-put—Cliff Anderson, Indiana	53 ft. 9 in.
Team—Indiana	37 pts.

INDOOR

(At Champaign, Ill.)

60 yd.—Clark Rice, Minnesota	0:06.3
440—Frank Harder, Purdue	0:49.7
880—Don Gehrmann, Wisconsin	1:54
1 mile—Don Gehrmann	4:10.4
2 miles—Donald McEwen, Michigan	9:07.2
70 low hurdles—Russ Merkel, Iowa	0:08.1
1 mile relay—Ohio State (Cogswell, Cole, Kunz, Turner)	3:19.3
Broad jump—Jim Holland, Northwestern	24 ft. 2½ in.
High jump—Lou Irons, Illinois, and Ed Jones, Purdue (tie)	6 ft. 3¾ in.
Pole vault—Don Laz, Illinois	14 ft. 3 in.
Shot-put—Charles Fonville, Michigan	53 ft. 1 in.
Team—Ohio State	35 pts.

Pacific Coast

OUTDOOR

(At Berkeley, Calif.)

100 yd.—Bill Feli, Oregon	0:09.9
220—Donnie Anderson, California	0:21.9
440—Dave Henthorne, Oregon	0:48.7
880—Bob Chambers, Southern California	1:55.1
1 mile—Jim Newcomb, Southern California	4:19.6
2 miles—Jim Newcomb	9:25.2
120 hurdles—Dick Attlesley, So. Calif.	0:14.3
220 hurdles—Dick Attlesley	0:23.5
1 mile relay—Stanford (Storum, Bly, Taylor, Johnson)	3:17.3
Broad jump—Henry Aihara, So. Calif.	24 ft. 5¼ in.
High jump—Jack Barnes, So. Calif.	6 ft. 5 in.
Discus—Dick Doyle, Montana	168 ft. 8¾ in.
Javelin—Franklin Held, Stanford	224 ft.
Pole vault—George Rasmussen, Oregon	14 ft. 4 in.
Shot-put—Otis Chandler, Stanford	57 ft. 4¼ in.
Team—Southern California	62½ pts.

Southwest

OUTDOOR

(At Austin, Texas)

100 yd.—Charley Parker, Texas	0:09.6
220—Charley Parker	0:21
440—Tom Cox, Rice	0:46.9
880—Otha Byrd, Rice	1:53.6
1 mile—Julian Herring, Texas A. & M.	4:17.4
2 miles—James Brown, Arkansas	9:34.5
120 hurdles—Paul Leming, Texas A. & M.	0:14.5
220 hurdles—Bob Hall, Texas A. & M.	0:23.3
440 relay—Texas (Rogers, Mayes, Samuels, Parker)	0:41.1
1 mile relay—Rice (Hudgins, Hoff, Brown, Cox)	3:14.3
Broad jump—Charles Meeks, Texas	24 ft. 4¼ in.
High jump—Bob Walters, Texas	6 ft. 8½ in.
Discus—George Kadera, Texas A. & M.	162 ft. ¼ in.
Javelin—Tobin Rote, Rice	202 ft. 3¼ in.
Pole vault—Don Graves, Texas A. & M., and Bob Walters, Texas (tie)	13 ft. 6 in.
Shot-put—John Morton, Texas Christian	49 ft. 4¼ in.
Team—Texas	60 pts.

The Pacific Coast Conference's track and field team beat the Big Ten, 69 to 63, in the annual intersectional meet, held at Madison, Wis., in 1950.

Big Seven

OUTDOOR

(At Lincoln, Nebr.)

100 yd.—Harry Meginnis, Nebraska.....	0:10.3
220—Harry Meginnis.....	0:21.9
440—Charles Coleman, Oklahoma.....	0:48.8
880—Bill Jacobs, Oklahoma.....	1:52.3
1 mile—Bob Karnes, Kansas.....	4:12.6
2 miles—Herb Semper, Kansas.....	9:21
120 hurdles—Bob Berkshire, Nebraska.....	0:15
220 hurdles—Jack Greenwood, Kansas.....	0:23.9
1 mile relay—(Schutzel, Stites, Dinamore, DeVinney).....	3:19.9
Broad jump—Herb Hoskins, Kansas State.....	24 ft. 2 1/4 in.
High jump—Bob Gorden, Missouri.....	6 ft. 6 1/8 in.
Discus—Rollin Prather, Kansas State.....	153 ft.
Javelin—George Holley, Colorado.....	204 ft.
Pole vault—Bill Carroll, Oklahoma.....	13 ft. 8 in.
Shot-put—Jim Allen, Colorado.....	53 ft. 10 1/2 in.
Team—Nebraska.....	105 1/2 pts.

INDOOR

(At Kansas City, Mo.)

60 yd.—Byron Clark, Missouri.....	0:06.3
440—Jerry Meador, Oklahoma.....	0:50
880—Pat Bowers, Kansas.....	1:55.6
1 mile—Bob Karnes, Kansas.....	4:17.2
2 miles—Herb Semper, Kansas.....	9:26.4
60 low hurdles—Merwin Hodel, Colorado.....	0:07
60 high hurdles—Ray Magsamen, Nebraska.....	0:07.7
1 mile relay—Oklahoma (Coleman, Swickey, Biggins, Meador).....	3:23.7
Broad jump—Herb Hoskins, Kansas State.....	23 ft. 10 in.
High jump—Bob Gorden, Missouri, and Virgil Severns, Kansas State (tie).....	6 ft. 3 in.
Pole vault—Bill Carroll, Oklahoma.....	13 ft. 11 1/2 in.
Shot-put—Rollin Prather, Kansas State.....	51 ft. 11 1/2 in.
Team—Kansas.....	40 pts.

Missouri Valley

OUTDOOR

(At Peoria, Ill.)

100 yd.—Dick Stolpe, Okla. A. & M.....	0:09.6
220—Dick Stolpe.....	0:21.6
440—John Voight, Okla. A. & M.....	0:47.6
880—Harold Tarrant, Okla. A. & M.....	1:54.6
1 mile—Earl Jones, Okla. A. & M.....	4:21.3
2 miles—Paul Efav, Okla. A. & M.....	9:41.9
120 hurdles—Roy Grieve, Bradley.....	0:14.6
220 hurdles—Roy Grieve.....	0:23.9
440 relay—Oklahoma A. & M. (Taylor, Gilchrist, Voight, Stolpe).....	0:42.5
1 mile relay—Oklahoma A. & M. (Gilchrist, Taylor, Voight, Stolpe).....	3:16.6
Broad jump—John Voight.....	23 ft. 3 3/8 in.
High jump—John Helntzman, Bradley.....	6 ft. 4 in.
Discus—Ira Barkman, Wichita.....	163 ft. 10 1/2 in.
Javelin—Don Nufer, Detroit.....	197 ft. 2 1/2 in.
Pole vault—John Childers, Wichita.....	12 ft. 10 1/2 in.
Shot-put—Jim Kurz, Okla. A. & M.....	50 ft. 8 1/2 in.
Team—Oklahoma A. & M.....	97 pts.

Central Collegiate Conference

(Open meet)

(At Marquette University Stadium, Milwaukee)

100 yd.—Paul Blenz, Tulane.....	0:09.7
220 (turn)—Paul Blenz.....	0:21.5
440—John Voight, Oklahoma A. & M.....	0:48.6
880—John Wilson, Pittsburgh.....	1:54.4
1 mile—Don Gehrmann, Wisconsin.....	4:10.2
2 miles—Warren Druetzler, Mich. State.....	9:12.3
60 hurdles—Bill Fleming, Notre Dame.....	0:14.5
220 hurdles—Norbert Badar, Mich. Normal.....	0:24.2
440 relay—Michigan Normal (Bibbs, Gundrum, Badar, Campbell).....	0:42.1
1 mile relay—Michigan State (Henson, Mackelski, Shek, Dianetti).....	3:19.3
Broad jump—Marcellus Boston, Iowa.....	23 ft. 9 1/2 in.
High jump—Vera McGrew, Rice.....	6 ft. 3 3/8 in.
Discus—Byrl Thompson, Minnesota.....	163 ft. 3 1/2 in.
Javelin—Lloyd Smith, Franklin Ind.....	202 ft. 4 in.
Pole vault—Don Laz, Illinois.....	14 ft. 2 1/2 in.
Shot-put—Byrl Thompson.....	52 ft. 8 1/2 in.
Team—Mich. State and Mich. Normal.....	31 pts. each

Southern

OUTDOOR

(At Chapel Hill, N. C.)

100 yd.—Tommy Woodlee, South Carolina.....	0:09.9
220—Tommy Woodlee.....	0:21.6
440—Charles Chambers, No. Car. State.....	0:48.6
880—Halstead Holden, North Carolina.....	1:55.6
1 mile—Tyson Creamer, Maryland.....	4:22.2
2 miles—Sam Magill, North Carolina.....	9:31.4
120 hurdles—Bill Albans, North Carolina.....	0:14.2
220 hurdles—Bill Albans.....	0:22.9
1 mile relay—N. C. State (Goldberg, Wadsworth, Ormmsen, Chambers).....	3:20.8
Broad jump—Bill Albans.....	24 ft. 10 in.
High jump—Jack Moody, North Carolina.....	6 ft. 2 1/4 in.
Discus—Jim O'Leary, Duke.....	144 ft. 1 1/8 in.
Javelin—Bob Kirk, North Carolina.....	198 ft. 7 3/4 in.
Pole vault—John Conner, Duke.....	12 ft. 6 in.
Shot-put—Jim O'Leary, Duke.....	50 ft. 5 in.
Team—North Carolina.....	73 1/2 pts.

INDOOR

(At Chapel Hill, N. C.)

60 yd.—Dave Willis, North Carolina.....	0:06.5
440—Bill Harrison, V. M. I.....	0:51.5
880—Jim Umbarger, Maryland.....	2:02
1 mile—Bob Pulmer, Maryland.....	4:30
70 low hurdles—Sam Magill, North Carolina.....	9:44.8
70 high hurdles—Bill Albans, North Carolina.....	0:07.7
1 mile relay—Maryland (Salvaneli, Browning, Kehoe, Buchler).....	3:31.1
Broad jump—Bill Albans.....	22 ft. 8 1/2 in.
High jump—Jack Moody, North Carolina.....	6 ft. 4 in.
Pole vault—Romas White and Bob Kirk, North Carolina (tie).....	11 ft. 6 in.
Shot-put—Jack Unterkofler, Maryland.....	49 ft. 7 3/4 in.
Team—North Carolina.....	60 pts.

Southeastern

OUTDOOR

(At Birmingham, Ala.)

100 yd.—Paul Blenz, Tulane.....	0:09.8
220—Paul Blenz.....	0:21.1
440—Bill Covington, La. State.....	0:48.7
880—Bill Geary, Tulane.....	1:55.9
1 mile—Whitney Overton, Auburn.....	4:20.5
2 miles—Whitney Overton.....	9:51.7
120 hurdles—Jack DeMedicis, Auburn.....	0:14.7
220 hurdles—Marvin Cichowski, Alabama.....	0:23.7
1 mile relay—La. State (Breathwit, Sulivold, Venable, Covington).....	3:18.8
Broad jump—Jimmy Fos, Tulane.....	23 ft. 4 1/2 in.
High jump—Herb Neff, Tennessee.....	6 ft. 3 1/2 in.
Discus—Carl Shield, Alabama.....	153 ft. 8 1/2 in.
Javelin—Johnny Stroud, Tennessee.....	183 ft. 6 1/2 in.
Pole vault—Marlin Korik, Tennessee.....	13 ft. 6 1/2 in.
Shot-put—Carl Shield.....	49 ft. 6 1/2 in.
Team—Alabama.....	42 1/2 pts.

Colored A. A.

OUTDOOR

(At Morgan State Stadium, Baltimore, Md.)

100 yd.—Arthur Bragg, Morgan State.....	0:09.7
220—Robert Tyler, Morgan State.....	0:21.6
440—George Rhoden, Morgan State.....	0:47.9
880—William Brown, Morgan State.....	1:53.9
1 mile—Thurlow Brown, Morgan State.....	4:25.3
2 miles—Thurlow Brown.....	9:53.5
120 hurdles—Lester Scott, Morgan State.....	0:14.6
220 hurdles—Edward Carter, No. Car. A. & T.....	0:24.3
Sprint medley relay—Morgan State (Rhoden, LaBeach, Tyler, W. Brown).....	3:25.4
1 mile relay—Morgan State (LaBeach, Triplett, Tyler, W. Brown).....	3:12.5
Broad jump—Bobby Clark, St. Augustine's.....	22 ft. 4 1/2 in.
High jump—Bobby Clark.....	6 ft. 2 in.
Discus—Reginald Pulley, Lincoln.....	141 ft. 7 3/4 in.
Javelin—William C. Lewis, Hampton.....	176 ft. 6 1/2 in.
Pole vault—Charles Bryant, Howard.....	12 ft. 4 in.
Shot-put—Andrew J. Rodez, Virginia Union.....	47 ft. 8 1/2 in.
Team—Morgan State.....	70 pts.

Lowers Channel Canoe Record

Peter Ross of Richmond, England, crossed the English Channel in an 18-foot kayak in 4 hours 7 minutes on Aug. 10, 1950, to better the existing canoe record by 50 minutes. He started from Cape Gris Nez, France, and finished at Dover, England.

The Big Seven upset the Southwest Conference, 79 to 52, in the track and field meet between the champions of the two circuits in 1950.

INTERCOLLEGIATE CONFERENCE TEAM CHAMPIONS, 1950

WESTERN

Baseball—Michigan and Wisconsin (tie)
Basketball—Ohio State
Fencing—Illinois
Golf—Purdue
Gymnastics—Illinois
Swimming—Ohio State
Tennis—Northwestern
Track (indoor)—Ohio State
Track (outdoor)—Indiana
Wrestling—Purdue

SOUTHERN

Baseball—Wake Forest
Basketball—North Carolina State
Golf—Wake Forest
Swimming—North Carolina
Tennis—Davidson
Track (indoor)—North Carolina
Track (outdoor)—North Carolina
Wrestling—Washington and Lee

SOUTHEASTERN

Baseball—Alabama
Basketball—Kentucky
Golf—Georgia
Swimming—Florida
Tennis—Florida
Track—Alabama

BIG SEVEN

Baseball—Nebraska
Basketball—Kansas State, Kansas, Nebraska (tie)
Golf—Kansas
Swimming—Oklahoma
Tennis—Oklahoma
Track (indoor)—Kansas
Track (outdoor)—Nebraska
Wrestling—Oklahoma

PACIFIC COAST

Baseball—Washington State
Basketball—U.C.L.A.
Boxing—Idaho
Golf—Stanford (So. Div.); Oregon State (No. Div.)
Gymnastics—Southern California
Rowing—Washington
Swimming—Stanford (So. Div.); Washington State (No. Div.)
Tennis—So. California (So. Div.); Washington (No. Div.)
Track—Southern California
Wrestling—Oregon State

SOUTHWEST

Baseball—Texas
Basketball—Arkansas and Baylor (tie)
Fencing—Rice
Golf—Texas
Swimming—Texas
Tennis—Rice
Track—Texas

MISSOURI VALLEY

Baseball—Bradley
Basketball—Bradley
Golf—Oklahoma A. & M.
Swimming—St. Louis
Tennis—St. Louis
Track—Oklahoma A. & M.

COLORED A. A.

Baseball—North Carolina A. & T.
Basketball—West Virginia State*
Basketball—No. Carolina College (Durham)
Boxing—Howard
Swimming—Howard
Tennis—Morgan State
Track—Morgan State
Wrestling—Howard

* Regular season champion.

Thorpe 'Greatest' Athlete

In 1950 the Associated Press polled the nation's sports experts on the "greats" in various fields during the past half-century. The list of winners:

Male athlete—Jim Thorpe.
Female athlete—Mildred D. Zaharias.
Baseball player—Babe Ruth.
Football player—Jim Thorpe.
Fighter—Jack Dempsey.
Basketball player—George Mikan.
Track performer—Jesse Owens.
Golfer—Bobby Jones.
Tennis player—Bill Tilden.
Swimmer—Johnny Weissmuller.
Race horse—Man o' War.

Greatest upset—The Boston Braves' four-straight world series victory over the Philadelphia Athletics in 1914.

Most dramatic event—Dempsey-Firpo heavyweight title fight at the Polo Grounds, New York, Sept. 14, 1923.

WRESTLING, 1950

World Champions

Flyweight—Bengt Johanson, Sweden
Bantamweight—Mahmoud Hassan, Egypt
Featherweight—Ollie Anderberg, Sweden
Lightweight—Joseph Gal, Hungary
Welterweight—Matti Simanainen, Finland
Middleweight—Axel Gronberg, Sweden
Light-heavyweight—Muharrem Candas, Turkey
Heavyweight—Bertil Anderson, Sweden
Team—Sweden (15 points)

National A. A. U. Champions

115 lb.—John Harrison, Fort Dobbs, Iowa
121 lb.—Arnold Plaza, Chicago
128 lb.—Richard Hauser, Waterloo, Iowa
136 lb.—C. Shuford Swift, San Leandro, Calif.
145 lb.—Keith Young, Algona, Iowa
155 lb.—William Nelson, Eagle Grove, Iowa
165 lb.—William Smith, Council Bluffs, Iowa
175 lb.—C. Shuford Swift, San Leandro, Calif.
191 lb.—Dave Whinfrey, Somerville, N. J.
Heavyweight—Fred Stoeker, Keystone, Iowa
Team—Iowa State Teachers (44 points)

ROWING

ROWING goes back so far in history that there is no possibility of tracing it to any particular aboriginal source. The oldest rowing race still on the calendar is the "Doggett's Coat and Badge" contest among professional watermen of the Thames (England) that began in 1715. The first Oxford-Cambridge race was held at Henley in 1829. Competitive rowing in the United States began with matches between boats rowed by professional oarsmen of the New York water front. They were oarsmen who rowed the small boats that plied as ferries from Manhattan Island to Brooklyn and return, or who rowed salesmen down the harbor to meet ships arriving from Europe. Since the first salesman to meet an incoming ship had some advantage over his rivals, there was keen competition in the bidding for fast boats and the best oarsmen. This gave rise to match races for a purse or a side bet on many occasions. The first of such races was held in June, 1811, in four-oared gigs.

Amateur boat clubs sprang up in the

United States between 1820 and 1830 and seven students of Yale joined together to purchase a four-oared lap-streak gig in 1843. The first Harvard-Yale race was held Aug. 3, 1852, on Lake Winnepesaukee, N. H. The first time an American college crew went abroad was in 1869 when Harvard challenged Oxford and was defeated on the Thames. There were early college rowing races on Lake Quinsigamond, near Worcester, Mass., and on Saratoga Lake, N. Y., but the Intercollegiate Rowing Association, in 1895, settled on the Hudson, at Poughkeepsie, as the setting for the annual "Poughkeepsie Regatta." In 1950 the I.R.A. shifted its classic to Marietta, Ohio. The National Association of Amateur Oarsmen, organized in 1872, has conducted annual championship regattas since that time. The first rowing races were held with lap-streak gigs but shells came into general favor about a century ago. The outrigger was invented in 1830 by Clasper, an Englishman. Yale used the sliding seat in 1870.

Rowing Statistics

Source: From *American Rowing*, Copyright by Robert F. Kelley; courtesy of G. P. Putnam's Sons.

Yale-Harvard Varsity Race Record

Rowed at Centre Harbor, N. H., in 1852; Springfield, Mass., in 1855, 1872-73, 1876-77; Worcester, Mass., 1859 to 1870; Saratoga Lake, N. Y., 1874-75; New London, Conn., 1878 to 1895, 1898 to 1916, 1919 to 1941, and since 1947; triangular race at Poughkeepsie, N. Y., in 1897 with Cornell victor in 20:34; Derby, Conn., in 1918, 1942, and Boston, Mass., in 1946. Course was 2 miles in 1852; 3 miles from 1855 to 1875, and 4 miles thereafter.

Year	Winner	Time	Year	Winner	Time	Year	Winner	Time
1852	Harvard	1	1890	Yale	21:29	1920	Harvard	23:11
1855	Harvard	22:00	1891	Harvard	21:23	1921	Yale	20:41
1859	Harvard	19:18	1892	Yale	20:48	1922	Yale	21:53
1860	Harvard	18:53	1893	Yale	25:01½	1923	Yale	22:10
1864	Yale	19:01	1894	Yale	23:45½	1924	Yale	21:58¾
1865	Yale	18:42½	1895	Yale	21:30	1925	Yale	20:26
1866	Harvard	18:43¼	1897	Yale	20:44	1926	Yale	20:14¾
1867	Harvard	18:12¾	1898	Yale	24:02	1927	Harvard	22:35¾
1868	Harvard	17:48½	1899	Harvard	20:52½	1928	Yale	20:21¾
1869	Harvard	18:02	1900	Yale	21:12¾	1929	Yale	21:20
1870	Harvard	20:30 ^a	1901	Yale	23:37	1930	Yale	20:09¾
1872	Harvard	16:57	1902	Yale	20:20	1931	Harvard	22:21
1873	Yale	16:59	1903	Yale	20:19¾	1932	Harvard	21:29
1874 ^b	Harvard	16:56	1904	Yale	21:40½	1933	Harvard	22:46¾
1875	Harvard	17:05	1905	Yale	22:33½	1934	Yale	19:51½
1876	Yale	22:02	1906	Harvard	23:02	1935	Yale	20:19
1877	Harvard	24:36	1907	Yale	21:10	1936	Harvard	20:19
1878	Harvard	20:44¾	1908 ^c	Harvard	24:10	1937	Harvard	20:02
1879	Harvard	22:15	1909	Harvard	21:50	1938	Harvard	20:20
1880	Yale	24:27	1910	Harvard	20:46½	1939	Harvard	20:48¾
1881	Yale	22:13	1911	Harvard	22:44	1940	Harvard	21:38
1882	Harvard	20:47¾	1912	Harvard	21:43½	1941	Harvard	20:40
1883	Harvard	25:46½	1913	Harvard	21:42	1942 ^d	Harvard	10:09¾
1884	Yale	20:31	1914	Yale	21:16	1943-45	No races	
1885	Harvard	25:15½	1915	Yale	20:52	1946 ^e	Harvard	9:18
1886	Yale	20:42	1916	Harvard	20:02	1947	Harvard	20:40
1887	Yale	22:56	1917	No race		1948 ^f	Harvard	19:21¾
1888	Yale	20:10	1918 ^g	Harvard	10:58	1949 ^h	Yale	19:52¾
1889	Yale	20:30	1919 ⁱ	Yale	21:42¾	1950	Harvard	21:36¾

¹ Harvard won by 3 to 4 lengths. ² Yale ran into Harvard at turn and was disqualified. ³ Yale did not finish, being disabled in collision. ⁴ Yale stroke taken from shell near 3-mile mark. ⁵ Race was informal; rowed at 2 miles on Housatonic. ⁶ Course was 1½ feet less than 4 miles. ⁷ Rowed at 2 miles. ⁸ Rowed at 1¾ miles. ⁹ Both crews broke downstream record. ¹⁰ Both crews broke upstream record.

POUGHKEEPSIE REGATTA RECORD

(Varsity eight-oared shells—4 miles)

Rowed on Saratoga Lake (3 miles) 1898. Rowed on Lake Cayuga, Ithaca, N. Y. (2 miles) 1920. Racing suspended in 1917, 1918, 1919, 1933, and 1942 to 1946, inclusive. Rowed at 3 miles from 1921 to 1924, inclusive, and since 1947.

Year	Time	First	Second	Third	Fourth	Fifth	Sixth
1895	21:25	Columbia	Cornell				
1896	19:59	Cornell	Harvard	Pennsylvania	Columbia		
1897	20:47 4/5	Cornell	Columbia				
1898	15:51 1/2	Pennsylvania	Cornell	Wisconsin	Columbia		
1899	20:4	Pennsylvania	Wisconsin	Cornell	Columbia		
1900	19:44 3/5	Pennsylvania	Wisconsin	Cornell	Columbia	Georgetown	
1901	18:53 1/5	Cornell	Columbia	Wisconsin	Georgetown	Syracuse	Pennsylvania
1902	19:5 3/5	Cornell	Wisconsin	Columbia	Pennsylvania	Syracuse	Georgetown
1903	18:57	Cornell	Georgetown	Wisconsin	Pennsylvania	Syracuse	Columbia
1904	20:22 3/5	Syracuse	Cornell	Pennsylvania	Columbia	Georgetown	Wisconsin
1905	20:29	Cornell	Syracuse	Georgetown	Columbia	Pennsylvania	Wisconsin
1906	19:36 4/5	Cornell	Pennsylvania	Syracuse	Wisconsin	Columbia	Georgetown
1907	20:2 2/5	Cornell	Columbia	Navy	Pennsylvania	Wisconsin	Georgetown
1908	19:24 1/5	Syracuse	Columbia	Cornell	Pennsylvania	Wisconsin	
1909	19:2	Cornell	Columbia	Syracuse	Wisconsin	Pennsylvania	
1910	20:42 1/5	Cornell	Pennsylvania	Columbia	Syracuse	Wisconsin	
1911	20:10 4/5	Cornell	Columbia	Pennsylvania	Wisconsin	Syracuse	
1912	19:31 2/5	Cornell	Wisconsin	Columbia	Syracuse	Pennsylvania	Stanford
1913	19:28 3/5	Syracuse	Cornell	Washington	Wisconsin	Columbia	Pennsylvania
1914	19:37 4/5	Columbia	Pennsylvania	Cornell	Syracuse	Washington	Wisconsin
1915	19:36 3/5	Cornell	Stanford	Syracuse	Columbia	Pennsylvania	
1916	20:15 2/5	Syracuse	Cornell	Columbia	Pennsylvania		
1920	11:2 3/5	Syracuse	Cornell	Columbia	Pennsylvania		
1921	14:7	Navy	California	Cornell	Pennsylvania	Syracuse	Columbia
1922*	13:33 3/5	Navy	Washington	Syracuse	Cornell	Columbia	Pennsylvania
1923	14:3 1/5	Washington	Navy	Columbia	Syracuse	Cornell	Pennsylvania
1924	15:2	Washington	Wisconsin	Cornell	Pennsylvania	Syracuse	Columbia
1925	19:24 4/5	Navy	Washington	Wisconsin	Pennsylvania	Cornell	Syracuse
1926	19:28 3/5	Washington	Navy	Syracuse	Pennsylvania	Columbia	California
1927	20:57	Columbia	Washington	California	Navy	Cornell	Syracuse
1928	18:35 4/5	California	Columbia	Washington	Cornell	Navy	Syracuse
1929	22:58	Columbia	Washington	Pennsylvania	Navy	Wisconsin	
1930	21:42	Cornell	Syracuse	M. I. T.	California	Columbia	Washington
1931	18:54 1/5	Navy	Cornell	Washington	California	Syracuse	Pennsylvania
1932	19:55	California	Cornell	Washington	Navy	Syracuse	Columbia
1934	19:44	California	Washington	Navy	Cornell	Pennsylvania	Syracuse
1935	18:52	California	Cornell	Washington	Navy	Syracuse	Pennsylvania
1936	19:9 3/5	Washington	California	Navy	Columbia	Cornell	Pennsylvania
1937	18:33 3/5	Washington	Navy	Cornell	Syracuse	California	Columbia
1938	18:19	Navy	California	Washington	Columbia	Wisconsin	Cornell
1939†	18:12 3/5	California	Washington	Navy	Cornell	Syracuse	Wisconsin
1940	22:42	Washington	Cornell	Syracuse	Navy	California	Columbia
1941	18:53 3/10	Washington	California	Cornell	Syracuse	Princeton	Wisconsin
1947	13:59 1/5	Navy	Cornell	Washington	California	Princeton	Syracuse
1948	14:06 2/5	Washington	California	Navy	Cornell	M. I. T.	Princeton
1949	14:42 3/5	California	Washington	Cornell	Navy	Princeton	Pennsylvania

* Record for three miles. † Record for four miles.

Seventh	Eighth	Tenth	Twelfth	
1925—Columbia	1926—Cornell	1947—Rutgers	1949—Rutgers	
1926—Wisconsin	1930—Wisconsin	1948—Columbia		
1927—Pennsylvania	1931—Wisconsin	1949—Stanford		
1928—Pennsylvania	1932—M. I. T.		Swamped	
1930—Pennsylvania	1940—Princeton		1895—Pennsylvania	1929—Syracuse
1931—Columbia	1941—M. I. T.	Eleventh	1897—Pennsylvania	1929—California
1932—Pennsylvania	1947—M. I. T.	1947—Columbia	1907—Syracuse	1929—Cornell
1934—Columbia	1948—Wisconsin	1948—Rutgers	1929—M. I. T.	1930—Navy
1935—Columbia	1949—Columbia	1949—M. I. T.		
1936—Syracuse				
1937—Wisconsin				
1938—Syracuse				
1939—Columbia				
1940—Wisconsin				
1941—Rutgers				
1947—Wisconsin				
1948—Pennsylvania				
1949—Wisconsin				

Ninth	
1931—M. I. T.	
1941—Columbia	
1947—Pennsylvania	
1948—Syracuse	
1949—Syracuse	

1950 I. R. A. REGATTA	
(At Marietta, Ohio, June 17)	
Varsity-2 miles—1, Washington (7:13.2); 2, Princeton; 3, Cornell; 4, Pennsylvania; 5, Wisconsin; 6, Boston U.; 7, Navy; 8, Columbia; 9, Rutgers; 10, M. I. T.; 11, Syracuse.	
Junior varsity-2 miles—1, Washington (8:10.4); 2, California; 3, Navy.	
Freshman-2 miles—1, Washington (8:07.5); 2, California; 3, Wisconsin.	

1950 I. R. A. REGATTA
(At Marietta, Ohio, June 17)

Varsity-2 miles—1, Washington (7:13.2); 2, Princeton; 3, Cornell; 4, Pennsylvania; 5, Wisconsin; 6, Boston U.; 7, Navy; 8, Columbia; 9, Rutgers; 10, M. I. T.; 11, Syracuse.

Junior varsity-2 miles—1, Washington (8:10.4); 2, California; 3, Navy.

Freshman-2 miles—1, Washington (8:07.5); 2, California; 3, Wisconsin.

OTHER ROWING CHAMPIONS, 1950

Intercollegiate

Distance Time

a Adams Cup—Harvard.....	1½ mi.....	9:09.8
b Blackwell Cup—Penn.....	2 mi.....	10:04.6
c Carnegie Cup—Cornell.....	2 mi.....	9:59
d Childs Cup—Penn.....	1½ mi.....	6:36.2
e Compton Cup—Harvard.....	1½ mi.....	9:08
f Dad Vail—Boston Univ.....	1½ mi.....	5:57.2
g Eastern Assn.—M. I. T.....	2,000 meters..	6:28.8
h Oxford-Cambridge—Cambridge..	4½ mi.....	20:15
i Stevenson Cup—Navy.....	1½ mi.....	7:51.3

150 POUNDS

j Goldthwait Cup—Yale.....	1½ mi.....	7:14
k Wright Cup—Yale.....	1½ mi.....	6:52

HARVARD-YALE

l Junior varsity (2 miles) Harvard.....	10:59.2
m Freshmen—Harvard.....	11:06.2
Sites—a Annapolis, Md.; b Derby, Conn.; c Derby; d Philadelphia; e Princeton, N. J.; f Poughkeepsie, N. Y.; g Annapolis; h London, England; i New York; j Derby; k Boston; l and m New London, Conn.	

United States Championships

(At Philadelphia, July 22 and 23)

Single sculls—John B. Kelly, Jr., Vesper B. C., Philadelphia.....	7:39
Assn. single sculls—Jack Guest, Jr., Don R. C., Toronto.....	7:25
¼-mile single sculls—John B. Kelly, Jr.....	1:15.2
Double sculls—Warren Neville-William J. Knecht, Vesper B. C.....	7:06.6
Quadruple sculls—Vesper B. C.....	6:20.8
Pair-oared shell with coxswain—Fairmount R. A., Philadelphia.....	7:42
Pair-oared shell without coxswain—John and Larry Kieffer, Fairmount R. A.....	7:24.4
4-oared shell with coxswain—West Side R. C., Buffalo.....	7:01
4-oared shell without coxswain—Vesper B. C.....	6:43.4
8-oared shell—West Side R. C.....	6:29.5
Intermediate 8-oared shell—New York A. C.....	6:14.6
145-lb. single sculls—Tom Smith, Leander B. C., Hamilton, Ontario.....	7:49.6
145-lb. ¼-mile single sculls—Joe Angyal, New York A. C.....	1:19.2
145-lb. double sculls—Jim Barker-Joe McFadden, Undine Barge Club, Philadelphia.....	7:21.2
145-lb. quadruple sculls—Undine Barge Club.....	6:32.2
145-lb. 4-oared shell with coxswain—Vesper B. C.....	6:53.6
145-lb. 8-oared shell—Undine Barge Club.....	6:32.2
Team (Barnes Trophy)—Vesper Boat Club.....	129 pts.

* Won one-mile re-row with West Side R. C. in 5:20.

British Henley

Diamond Sculls—Anthony Rowe, Great Britain
Grand Challenge Cup—Harvard University
Thames Challenge Cup—Kent (Conn.) School

Wood Keeps Sculling Crown

Mervyn T. Wood of Australia retained his world's single sculling crown in 1950 by turning back the challenges of Jack Kelly, Jr., of the United States and Tony Rowe of England in a race at a mile and a quarter on the Schuylkill River, Philadelphia. With a victory went the \$6,000 Philadelphia Gold challenge Cup. Wood's time for the event was 14 1/5, with Kelly second in 7:16 2/5.

Royal Canadian Henley

(At Port Dalhousie, Ontario)

Championship singles—John B. Kelly, Jr.....	7:24.6
Assn. singles—Jack Guest, Jr.....	7:25
Open ¼-mile dash—Jack Guest, Jr.....	1:18.6
Sr. pair oars—Fairmount R. A. (rowover).....	8:06
Sr. doubles—John B. Kelly, Jr.-W. J. Knecht.....	7:22.6
Sr. fours with coxswain—West Side R. C.....	7:22.4
Sr. fours without coxswain—Detroit B. C.....	7:17
Sr. eights—West Side R. C.....	6:25.2
Sr. 155-lb. fours—Leander B. C.....	7:35
Sr. 155-lb. eights—St. Catharines R. C.....	6:48
Sr. 145-lb. singles—Joe Angyal.....	7:48
Sr. 145-lb. doubles—Jim Barker-Joe McFadden.....	7:34
Sr. 145-lb. fours—West Side R. C.....	7:08.6
Sr. 145-lb. eights—St. Catharines R. C.....	6:50.2
Team—St. Catharines (Ont.) R. C.....	336 pts.

GYMNASTICS, 1950

World Champions

	Points
All-around—Walter Lehmann, Switzerland.....	143.30
Free exercises—Ernst Gebendinger, Switzerland.....	19.25
Horizontal bar—Paavo Aaltonen, Finland.....	19.45
Long horse—Ernst Gebendinger.....	19.45
Parallel bars—Hans Eugster, Switzerland.....	19.85
Rings—Walter Lehmann.....	19.60
Side horse—Josef Stalder, Switzerland.....	19.70
Team—Switzerland.....	852.25

WOMEN

All-around—Helena Rakoczy, Poland.....	94.01
Beam—Helena Rakoczy.....	23.433
Free exercises—Helena Rakoczy.....	23.166
Rings or uneven bars (choice)—Trude Kolar, Austria (rings) and Ann-Sofi Petersson, Sweden (rings).....	24.0
Side-horse—Helena Rakoczy.....	23.5
Team drill—Sweden.....	72.80
Team—Sweden.....	607

National A. A. U. Champions

All-around—Bill Roetzheim, Florida State U.....	310.4
Calisthenics—Ara Hairabedian, Univ. of So. California.....	55.0
Flying rings—George Wikler, Los Angeles A. C.....	57.0
Horizontal bar—Bill Roetzheim.....	55.7
Indian clubs—Edward Hennig, East Side Turners, Cleveland.....	27.1
Long horse—Jack Barnes, U. of So. California.....	55.0
Parallel bars—Edward Scrobe, American Turners, New York.....	54.6
Rope climb—Don Perry, Pasadena (Calif.) Y.M.C.A.....	3.1s.
Side horse—Eugene Rabbitt, Syracuse U.....	54.7
Tumbling—Irwin E. Bedard, U. of Illinois.....	29.1
Team—Los Angeles A. C.....	39

WOMEN

All-around—Clara M. Schroth, Phila. Turners.....	282.3
Balance beam—Clara M. Schroth.....	57.3
Calisthenics—Clara M. Schroth.....	57.6
Flying rings—Clara M. Schroth.....	57.0
Indian clubs—Roberta R. Bonniwell, Phila. Turners.....	27.7
Parallel bars—Clara M. Schroth.....	55.2
Side horse—Marian T. Barone, Phila. Turners.....	56.5
Tumbling—Joanne Slocum, Dallas A. C.....	27.2
Team drill—Swiss Turn Verein, Paterson, N. J.....	175.3

Wif Pepine of Quebec City won the 90-mile international sled-dog derby that finished in Ottawa last year. Pepine was timed in 8:41:30 for the three 30-mile laps.

Who's Who in Sports

(Name, Birthplace and Date of Birth)

BASEBALL

- APPLING, Luke, High Point, N. C., April 2, 1909.
- BLACKWELL, Ewell, Jr., Fresno, Calif., Oct. 23, 1922.
- BOUDREAU, Lou, Harvey, Ill., July 17, 1917.
- BRANNICK, Eddie, New York, N. Y., July 22, 1893.
- CHANDLER, A. B. (Happy), Corydon, Ky., July 14, 1898.
- COAKLEY, Andy, Providence, Nov. 20, 1882.
- COBB, Tyrus R. (Ty), Banks County, Ga., Dec. 17, 1886.
- COCHRANE, Gordon S. (Mickey), Bridge-water, Mass., Apr. 6, 1903.
- CRONIN, Joe, San Francisco, Oct. 12, 1906.
- DEAN, Jerome H. (Dizzy), Holdenville, Okla., Jan. 16, 1911.
- DICKEY, Bill, Bastrop, La., June 6, 1907.
- DI MAGGIO, Dom, San Francisco, Calif., Feb. 12, 1918.
- DI MAGGIO, Joe, Martinez, Calif., Nov. 25, 1914.
- DUROCHER, Leo, West Springfield, Mass., July 27, 1906.
- DYER, Eddie, Morgan City, La., Oct. 11, 1900.
- DYKES, Jimmie, Philadelphia, Nov. 10, 1896.
- EVANS, Billy, Chicago, Feb. 10, 1884.
- FELLER, Bobby, Van Meter, Iowa, Nov. 3, 1918.
- FRICK, Ford C., Wawaka, Ind., Dec. 19, 1894.
- FRISCH, Frank F., New York, Sept. 9, 1898.
- GORDON, Joseph L. (Flash), Los Angeles, Calif., Feb. 18, 1915.
- GREENBERG, Hank, New York, Jan. 1, 1911.
- GRIFFITH, Clark C., Clear Creek, Mo., Nov. 20, 1869.
- GROVE, Robert M. (Lefty), Lonaconing, Md., March 6, 1900.
- HARRIDGE, Will, Chicago, Oct. 16, 1886.
- HARRIS, Stanley R. (Bucky), Port Jervis, N. Y., Nov. 8, 1896.
- HELLMANN, Harry, San Francisco, Calif., Aug. 3, 1894.
- HEYDLER, John A., La Fargeville, N. Y., July 10, 1869.
- HORNSBY, Rogers, Winters, Texas, Apr. 27, 1896.
- HUBBARD, Cal, Keyesville, Mo., Oct. 31, 1900.
- KINER, Ralph, Santa Rita, N. M., Oct. 27, 1922.
- KLEM, Bill, Rochester, N. Y., Feb. 22, 1874.
- LYONS, Ted, Lake Charles, La., Dec. 28, 1900.
- MCCARTHY, Joe, Philadelphia, Pa., Apr. 21, 1887.
- MCGOWAN, Bill, Wilmington, Del., Jan. 18, 1896.
- MACK, Connie, East Brookfield, Mass., Dec. 23, 1862.
- MCKECHNIE, William B., Wilkesburg, Pa., Aug. 7, 1877.
- MEYER, Bill, Knoxville, Jan. 14, 1893.
- MUSIAL, Stan, Donora, Pa., Nov. 21, 1920.
- NEWHOUSE, Hal, Detroit, May 20, 1921.
- O'NEILL, Steve, Minooka, Pa., July 6, 1891.
- OTT, Mel, Gretna, La., Mar. 2, 1909.
- RICKEY, Branch, Senecaville, Ohio, Dec. 20, 1881.
- RIZZUTO, Phil, New York, Sept. 25, 1918.
- ROBINSON, Jackie, Cairo, Ga., Jan. 31, 1919.
- ROLFE, Robert (Red), Penacook, N. H., Oct. 17, 1908.
- ROMMEL, Ed., Baltimore, Sept. 13, 1897.
- RUEL, Herold (Muddy), St. Louis, Mo., Feb. 20, 1896.
- SAWYER, Eddie, Westerly, R. I., Sept. 10, 1910.
- SEWELL, Luke, Titus, Ala., Jan. 15, 1901.
- SIMMONS, Al, Milwaukee, May 22, 1903.
- SHAUGHNESSY, Frank J., Albion, Ill., April 8, 1885.
- SHOTTON, Burt E., Brownhelm, Ohio, Oct. 18, 1884.
- SISLER, George H., Manchester, Ohio, Mar. 24, 1893.
- SOUTHWORTH, Billy, Harvard, Nebr., Mar. 9, 1893.
- SPEAKER, Tris, Hubbard, Texas, Apr. 4, 1888.
- STENGEL, Charles D. (Casey), Kansas City, Mo., July 30, 1891.
- STEWART, Bill, Fitchburg, Mass., Sept. 20, 1895.
- TAYLOR, Zack, Yulee, Fla., July 27, 1893.
- TRAUTMAN, George M., Bucyrus, Ohio, Jan. 11, 1890.
- TRAYNOR, Harold J. (Pie), Framingham, Mass., Nov. 11, 1899.
- WAGNER, John P. (Hans), Mansfield, Pa., Feb. 24, 1874.
- WALTERS, Bucky, Philadelphia, Pa., April 19, 1910.
- WEISS, George M., New Haven, Conn., June 23, 1895.
- WILLIAMS, Ted, San Diego, Calif., Oct. 30, 1918.
- YOUNG, Cy, Gilmore, Ohio, March 29, 1867.

BASKETBALL

- ALLEN, Forrest C. (Phog), Jamesport, Mo., Nov. 18, 1885.
- AUERBACH, Arnold, Brooklyn, N. Y., Sept. 20, 1917.
- BARKER, Cliff, Yorktown, Ind., Jan. 15, 1921.
- BROWNSTEIN, Phil, Chicago, May 17, 1906.
- CANN, Howard, Bridgeport, Conn., Oct. 11, 1895.
- CERVI, Al, Buffalo, N. Y., Feb. 12, 1918.
- DAVIES, Bob, Harrisburg, Pa., Jan. 15, 1921.
- FULKS, Joe, Birmingham, Ky., Oct. 26, 1921.
- GOTTLIEB, Edward, Philadelphia, Pa., Sept. 15, 1899.
- GROZA, Alex, Martins Ferry, Ohio, Oct. 7, 1926.
- HARRISON, Lester, Rochester, N. Y., Aug. 20, 1904.
- HOLMAN, Nat, New York, Oct. 19, 1896.
- IBA, Henry P., Easton, Mo., Aug. 6, 1904.
- JEANNETTE, Buddy, New Kensington, Pa., Sept. 15, 1917.
- JULIAN, Alvin, Reading, Pa., Apr. 5, 1901.
- KUNDLA, John, Star Junction, Pa., July 3, 1916.
- LAPCHICK, Joe, Yonkers, N. Y., April 12, 1900.
- LEWIS, Grady, Boyd, Texas, March 25, 1917.
- LOEFFLER, Kenneth, Beaver Falls, Pa., April 14, 1904.
- McDERMOTT, Bob, Whitestone, N. Y., Jan. 7, 1916.
- McGUIRE, Dick, Rockaway Beach, N. Y., Jan. 26, 1926.
- MIKAN, George, Joliet, Ill., June 18, 1924.
- RUPP, Adolph, Halstead, Kans., Sept. 2, 1901.

BOXING

- ARMSTRONG, Henry, St. Louis, Mo., Dec. 12, 1912.
- BAER, Max, Omaha, Nebr., February 11, 1909.
- BRADDOCK, Jim, North Bergen, N. J., Dec. 6, 1905.
- BURNS, Tommy, Hanover, Canada, June 17, 1881.
- CHARLES, Ezzard, Atlanta, July 20, 1921.
- DEMPSEY, Jack, Manassa, Colo., June 24, 1894.
- GRAZIANO, Rocky, New York, N. Y., June 7, 1922.
- GREENE, Abe J., Paterson, N. J., Nov. 27, 1899.
- JACK, Beau, Augusta, Ga., Apr. 1, 1921.
- JACOBS, Mike, New York, March 10, 1880.
- JEFFRIES, James J., Carroll, Ohio, Apr. 15, 1875.
- LA MOTTA, Jake, New York, July 10, 1922.
- LANGFORD, Sam, Weymouth, N. Ireland, Feb. 12, 1880.
- LESNEVICH, Gus, Cliffside Park, N. J., Feb. 22, 1915.
- LOUIS, Joe, Lexington, Ala., May 13, 1914.
- MAXIM, Joey, Cleveland, March 28, 1922.
- MILLS, Freddie, Bournemouth, England, June 26, 1919.
- NORRIS, Jim, Chicago, Nov. 6, 1906.
- ORTIZ, Manuel, Corona, Calif., July 2, 1916.
- PEP, Willie, Middletown, Conn., Nov. 20, 1922.
- ROBINSON, Ray, Detroit, May 3, 1920.
- ROSENBLOOM, Max, New York, N. Y., Sept. 6, 1904.
- SADDLER, Sandy, Boston, June 28, 1926.
- SAVOLD, Lee, Marshall, Minn., March 22, 1916.
- TUNNEY, Gene, New York, May 25, 1898.
- WALCOTT, Joe, Merchantville, N. J., Jan. 31, 1914.
- WALKER, Mickey, Elizabeth, N. J., July 18, 1901.
- WILLARD, Jess, Pottawatomie County, Kans., Dec. 29, 1883.
- WILLIAMS, Ike, Brunswick, Ga., Aug. 2, 1923.

FOOTBALL

- BAUGH, Sammy, Temple, Tex., Mar. 17, 1914.
- BELL, Bert, Philadelphia, Pa., Feb. 25, 1894.
- BIBLE, Dana X., Jefferson City, Tenn., Oct. 8, 1891.
- BIERMAN, Bernard W., Springfield, Minn., Mar. 11, 1894.
- BLAIK, Earl H., Detroit, Feb. 15, 1897.
- BROWN, Paul E., Norwalk, Ohio, Sept. 7, 1908.
- CRISLER, Herbert O. (Fritz), Earlville, Ill., Jan. 12, 1899.
- CROWE, Clem, Lafayette, Ind., Oct. 18, 1913.
- DAWSON, Lowell (Red), Minneapolis, Minn., Dec. 20, 1906.

Football—(cont.)

- DORAIS, Gus, Chippewa Falls, Wis., July 2, 1891.
- DUDLEY, Bill, Bluefield, Va., Dec. 24, 1921.
- EDWARDS, Albert G. (Turk), Clarkston, Wash., Sept. 28, 1907.
- FLAHERTY, Ray, Spokane, Wash., Sept. 1, 1904.
- GRAHAM, Otto, Waukegan, Ill., Dec. 6, 1921.
- GRANGE, Harold (Red), Wheaton, Ill., June 13, 1904.
- HALAS, George, Chicago, Feb. 2, 1895.
- HEFFELFINGER, W. W. (Pudge), Minneapolis, Minn., Dec. 20, 1867.
- HEIN, Mel, Redding, Calif., Aug. 22, 1909.
- HICKMAN, Herman, Johnson City, Tenn., Oct. 1, 1912.
- HUTSON, Don, Pine Bluff, Ark., Jan. 31, 1913.
- ISELL, Cecil, Huston, Texas, July 11, 1915.
- LAMBEAU, E. L. (Curly), Green Bay, Wis., April 9, 1898.
- LAYDEN, Elmer F., Davenport, Iowa, May 4, 1903.
- LEAHY, Frank, O'Neill, Nebr., Aug. 21, 1908.
- LITTLE, Lou, Leominster, Mass., Dec. 6, 1893.
- LUCKMAN, Sid, Brooklyn, Nov. 21, 1916.
- McLAUGHRY, DeOrmond (Tuss), Chicago, May 19, 1893.
- McMILLIN, Alvin N. (Bo), Prairie Hill, Tex., Jan. 12, 1899.
- MICHELOSEN, Johnny, Pittsburgh, Feb. 13, 1915.
- MOTLEY, Marion, Leesburg, Ga., June 5, 1920.
- NAGURSKI, Bronko, International Falls, Minn., Nov. 3, 1908.
- NEALE, Earle (Greasy), Parkersburg, W. Va., Nov. 6, 1891.
- NEVERS, Ernie, Willow River, Minn., June 11, 1903.
- NEYLAND, Robert, Greenville, Texas, Sept. 17, 1892.
- OWEN, Steve, Cleo Springs, Okla., April 21, 1898.
- PHELAN, Jimmy, Sacramento, Calif., Dec. 5, 1893.
- RONZANI, Gene, Iron Mountain, Mich., March 28, 1909.
- SHAUGHNESSY, Clark D., St. Cloud, Minn., Mar. 6, 1892.
- SHAW, Lawrence T. (Buck), Mitchellville, Iowa, March 28, 1899.
- SPEEDIE, Mac, Odell, Ill., Jan. 12, 1920.
- SPEARS, Dr. Clarence W., De Witt, Ark., July 24, 1894.
- STAGG, A. Alonzo, West Orange, N. J., Aug. 16, 1862.
- STRADER, Norman (Red), Newton, N. J., Dec. 21, 1904.
- STRONG, Ken, West Haven, Conn., Apr. 21, 1906.
- STYDAHAR, Joe, Kaylor, Pa., March 3, 1912.
- STUHLREHER, Harry A., Massillon, Ohio, Oct. 14, 1901.
- THOMAS, Frank, Muncie, Ind., Nov. 15, 1898.
- THORPE, Jim, near Prague, Okla., May 28, 1888.
- TRIPPI, Charley, Pittston, Pa., Dec. 14, 1922.
- VAN BUREN, Steve, Tela, Honduras, Dec. 20, 1920.
- WADE, Wallace, Trenton, Tenn., June 15, 1892.
- WARNER, Glenn S., Springville, N. Y., Apr. 5, 1871.
- WATERFIELD, Bob, Elmira, N. Y., July 26, 1920.

GOLF

- ALEXANDER, Stewart (Skip), Jr., Lexington, N. C., Aug. 6, 1918.
- ARMOUR, Tommy, Edinburgh, Scotland, Sept. 24, 1895.
- CHAPMAN, Dick, Greenwich, Conn., March 23, 1911.
- COTTON, Henry, Jan. 26, 1907.
- DEMARET, Jim, Houston, Texas, May 10, 1910.
- DUDLEY, Ed, Brunswick, Ga., Feb. 10, 1902.
- FERRIER, Jim, Manly, Australia, Feb. 24, 1915.
- HAGEN, Walter, Rochester, N. Y., Dec. 21, 1892.
- HARMON, Claude, Savannah, Ga., July 14, 1916.
- HOGAN, Ben, Dublin, Tex., Aug. 13, 1912.
- JONES, Bobby, Atlanta, Mar. 17, 1902.
- LITTLE, W. Lawson, Jr., Newport, R. I., June 23, 1910.
- LOCKE, Arthur D. (Bobby), Germiston, Transvaal, South Africa, Nov. 20, 1917.
- McSPADEN, Harold (Jug), Rosedale, Kans., July 21, 1908.
- MANGRUM, Lloyd, Dallas, Aug. 1, 1914.
- MIDDLECOFF, Cary, Halls, Tenn., Jan. 6, 1921.
- NELSON, Byron, Fort Worth, Texas, Feb. 4, 1912.
- OLIVER, Ed (Porky), Wilmington, Del., Sept. 6, 1916.

Golf—(cont.)

- ORCUTT, Maureen, New York, Apr. 1, 1907.
 RIEGEL, Robert H. (Skee), New Bloomfield, Pa., Nov. 25, 1914.
 SARAZEN, Gene, Harrison, N. Y., Feb. 27, 1902.
 SHUTE, Denny, Cleveland, Oct. 25, 1904.
 SNEAD, Sam, Hot Springs, Va., May 27, 1912.
 STRANAHAN, Frank R., Toledo, Ohio, Aug. 5, 1922.
 SUGGS, Louise, Atlanta, Ga., Sept. 7, 1923.
 TURNESA, Joe, New York, Jan. 31, 1901.
 TURNESA, Willie, Elmsford, N. Y., Jan. 20, 1914.
 VARE, Glenna Collett, New Haven, Conn., June 20, 1903.
 VINES, H. Ellsworth, Jr., Los Angeles, Calif., Sept. 28, 1911.
 WARD, Marvin H. (Bud), Olympia, Wash., May 1, 1913.
 WORSHAM, Lew, Alta Vista, Va., Oct. 5, 1917.
 ZAHARIAS, Mildred Didrikson (Babe), Port Arthur, Tex., June 26, 1913.

HOCKEY

- ABEL, Sid, Melville, Sask., Feb. 22, 1918.
 ADAMS, Jack, Fort William, Ontario, June 14, 1895.
 BENTLEY, Doug, Delisle, Sask., Sept. 3, 1916.
 BENTLEY, Max, Delisle, Sask., March 1, 1920.
 BOUCHER, Frank, Ottawa, Ont., Oct. 7, 1901.
 BRODA, Walter (Turk), Brandon, Manitoba, May 15, 1914.
 CAMPBELL, Clarence, Fleming, Saskatchewan, July 9, 1905.
 COLVILLE, Neil, Edmonton, Alberta, Aug. 4, 1914.
 DAY, C. H. (Happy), Owen Sound, Ontario, June 1, 1901.
 GOODFELLOW, Ebbie, Ottawa, April 9, 1907.
 IRVIN, Dick, Hamilton, Ont., July 19, 1892.
 IVAN, Tommy, Toronto, Jan. 31, 1911.
 KENNEDY, Ted, Port Colborne, Ontario, Dec. 12, 1925.
 LINDSAY, Ted, Renfrew, Ontario, July 29, 1925.
 MORTSON, Gus, New Liskeard, Ontario, Jan. 24, 1926.
 MURDOCH, MURRAY, Lucknow, Ont., May 19, 1904.
 PATRICK, Lester, Drummondville, Quebec, Dec. 31, 1883.
 PATRICK, Lynn, Victoria, B. C., Feb. 3, 1912.
 PRIMEAU, Joe, Lindsay, Ontario, Jan. 29, 1906.
 RAYNOR, Chuck, Sutherland, Sask., Aug. 11, 1920.
 REARDON, Kenny, Winnipeg, Manitoba, April 1, 1921.
 RICHARD, Maurice, Montreal, Quebec, Aug. 4, 1921.
 ROSS, Arthur H., Naughton, Ontario, Jan. 13, 1886.
 SCHMIDT, Milt, Kitchener, Ontario, March 5, 1918.
 SHORE, Eddie, Fort Qu'Appelle, Saskatchewan, Nov. 26, 1902.
 SMYTHE, Conn, Toronto, Feb. 1, 1895.
 STEWART, Jack, Pilot Mound, Manitoba, May 6, 1917.
 WATSON, Phil, Montreal, Oct. 24, 1914.

HORSE RACING

- ADAMS, Johnny, Iola, Kans., Aug. 1, 1914.
 ARCARO, Eddie, Cincinnati, Ohio, Feb. 19, 1916.
 ATKINSON, Ted, Toronto, June 17, 1916.
 BROOKS, Steve, McCook, Nebr., Aug. 12, 1921.
 CASSIDY, Marshall, Washington, D. C., Feb. 21, 1892.
 FITZSIMMONS, James (Sunny Jim), Sheepshead Bay, N. Y., July 23, 1874.
 GAVER, John M., Mt. Airy, Md., Oct. 29, 1900.
 GLISSON, Gordon, Winnsboro, S. C., Oct. 31, 1930.
 HIRSCH, Max, Fredericksburg, Texas, July 12, 1880.
 JACOBS, Hirsch, New York, April 8, 1904.
 JONES, Ben A., Parnell, Mo., Dec. 31, 1882.
 JONES, H. A. (Jimmy), Parnell, Mo., Nov. 24, 1906.
 LONGDEN, Johnny, Wakefield, England, Feb. 14, 1910.
 MEHRTENS, Warren, Brooklyn, N. Y., Nov. 5, 1920.
 MOLTER, Willie, Fredericksburg, Texas, June 2, 1910.
 SANDE, Earl, Groton, S. D., Nov. 19, 1898.
 VANDERBILT, Alfred G., London, England, Sept. 22, 1912.
 WHITNEY, C. V., New York, Feb. 20, 1899.
 WIDENER, George D., Philadelphia, March 11, 1889.
 WOODWARD, William, New York, N. Y., April 7, 1876.

TENNIS

- BAKER, Lawrence A., Lowndesville, S. C., June 20, 1890.
- BROMWICH, John, Kogarah, N.S.W., Australia, Nov. 14, 1918.
- BROUGH, A. Louise, Oklahoma City, Okla., March 11, 1923.
- BUDGE, J. Donald, Oakland, Calif., June 13, 1915.
- COCHELL, Earl H., Sacramento, Calif., May 18, 1922.
- DU PONT, Margaret Osborne, Joseph, Oreg., March 4, 1918.
- FLAM, Herbert, Brooklyn, Oct. 17, 1928.
- FRY, Shirley, Akron, Ohio, June 30, 1927.
- GONZALES, Richard (Pancho), Los Angeles, May 9, 1928.
- HART, Doris, St. Louis, June 20, 1925.
- KRAMER, John A., Las Vegas, Nev., Aug. 1, 1921.
- LARSEN, Arthur, San Leandro, Calif., April 17, 1925.
- MARBLE, Alice L., Plumas County, Calif., Sept. 28, 1913.
- MORAN, Gertrude (Gussy), Santa Monica, Calif., Aug. 8, 1923.
- MULLOY, Gardnar, Miami, Fla., Nov. 22, 1914.
- PARKER, Frank, Milwaukee, Jan. 31, 1916.
- PATTY, Budge, Feb. 11, 1924.
- PEREZ, Helen P., Vience, Calif., May 7, 1929.
- RICHARDS, Vincent, New York, N. Y., March 20, 1903.
- RIGGS, Robert L., Los Angeles, Calif., Feb. 25, 1918.
- ROARK, Helen Wills Moody, Centerville, Calif., Oct. 6, 1905.
- SCHROEDER, Ted., Newark, N. J., July 20, 1921.
- SEDGMAN, Frank, Mont Albert, Victoria, Australia, Oct. 29, 1927.
- SEGURA, Francisco, Guayaquil, Ecuador, June 20, 1921.
- SEIXAS, E. Victor, Jr., Philadelphia, Aug. 30, 1923.
- TALBERT, Billy, Cincinnati, Sept. 4, 1918.
- TILDEN, William T., II, Philadelphia, Pa., Feb. 10, 1893.
- TODD, Patricia C., San Francisco, July 22, 1922.

OTHER SPORTS

- ANGYAL, Joe, New York, April 16, 1916 (Rowing).
- BINGHAM, William J., Norristown, Pa., Aug. 8, 1889 (Athletic director).
- BOSTWICK, George H. (Pete), New York, Aug. 14, 1909 (Polo).
- BRUNDAGE, Avery, Detroit, Sept. 28, 1887 (Executive).
- BUSHNELL, Asa S., Springfield, Ohio, Feb. 2, 1900 (Executive).
- COFFEY, Jack, New York, Jan. 28, 1888 (Athletic director).
- CROMWELL, Dean B., Turner, Oreg., Sept. 20, 1879 (Track and Field).
- DE MAR, Clarence, Melrose, Mass., Mar. 20, 1888 (Marathon).
- DEVLIN, Arthur, Lake Placid, N. Y., Sept. 7, 1923 (Skiing).
- DILLARD, Harrison, Cleveland, July 8, 1923 (Track).
- ELLING, Emil Von, New York, N. Y., Mar. 30, 1883 (Track and Field).
- ENGEN, Alf, Nijondalen, Norway, May 15, 1909 (Skiing).
- FALCARO, Joe, Naples, Italy, Jan. 3, 1896 (Bowling).
- FERRIS, Dan, Pawling, N. Y., July 7, 1899 (Track and Field).
- FUCHS, Jim, Chicago, Dec. 6, 1927 (Shot-putter).
- HELMS, Hermann, Brooklyn, Jan. 5, 1870 (Chess).
- HENRY, Ken, Chicago, Ill., Jan. 7, 1929 (Speed skating).
- HOPPE, Willie, Cornwall, N. Y., Oct. 11, 1887 (Billiards).
- IGLEHART, Stewart, Feb. 22, 1910 (Polo).
- KILPATRICK, John Reed, New York, N. Y., June 15, 1889 (Executive).
- KIPHUTH, Robert J. H. (Bob), Tonawanda, N. Y., Nov. 17, 1890 (Athletic director).
- McLANE, Jimmy, Pittsburgh, Sept. 13, 1930 (Swimming).
- MARSHALL, John, Bondi, N. S. W., Australia, March 29, 1930.
- MATHIAS, Bob, Tulare, Calif., Nov. 17, 1930 (Track and Field).
- OWENS, Jesse, Decatur, Ala., Sept. 12, 1913 (Track and Field).
- PALIN, Sep. F., Rushville, Ind., April 11, 1876 (Harness racing).
- RICE, Grantland, Murfreesboro, Tenn., Nov. 1, 1880 (Writer).
- SCHAEFER, Jake, Chicago, Oct. 18, 1894 (Billiards).
- STACK, Allen, New Haven, Conn., Jan. 23, 1928 (Swimming).
- VANDERBILT, Harold S., Oakdale, N. Y., July 6, 1884 (Yachting).
- VARIPAPA, Andy, Italy, Mar. 31, 1894 (Bowling).
- VERDEUR, Joe, Philadelphia, July 3, 1926 (Swimming).
- WERKET, John R., St. Paul, Minn., Oct. 8, 1924 (Speed skating).
- WHITE, Ben, Whiteville, Ontario, Feb. 5, 1873 (Harness racing).

SKIING

SKIS were devised for utility, to aid those who had to travel over snow. The Norwegians, Swedes, Lapps and other inhabitants of northern lands used skis for many centuries before skiing became a sport. Emigrants from these countries brought skis to the United States with them. The first skier of record in the United States was a mailman by the name of "Snowshoe" Thomson, born and raised in Telemarken, Norway, who came to the United States and, beginning in 1850, used

skis through twenty successive winters in carrying mail from northern California to Carson Valley, Nevada.

Ski clubs sprang up about sixty years ago where there were Norwegian and Swedish settlers in Wisconsin and Minnesota and ski contests were held in that territory in 1886. On Feb. 21, 1904, at Ishpeming, Mich., a small group of skiers organized the National Ski Association that, with the rapid growth of the sport, now has more than 450 member clubs.

1950 CHAMPIONSHIPS

World—Nordic Events

(At Lake Placid, N. Y., and Rumford, Maine)

Cross-country (18 km.)—Karl-Erik Aastrom, Sweden	1:06:16
Jumping—Simon Slattvik, Norway	231 pts.
Combined jumping and cross-country—Heikki Hasu, Finland	455.2 pts.
Special jumping—Hans Bjornstad, Norway	220.4 pts.
50-km. cross-country—Gunnar Ericksson, Sweden	2:59:05
40-km. relay—Sweden (Nils Taapp, Aastrom, Martin Lundstrom, Enar Josefsson)	2:39:59

World—Alpine Events

(At Aspen, Colorado)

Downhill—Zeno Colo, Italy	2:34.4
Slalom—Georges Schneider, Switzerland	2:06.4
Giant slalom—Zeno Colo	1:54.4

WOMEN

Downhill—Trude Beiser-Jochum, Austria	2:06.6
Slalom—Dagmar Rom, Austria	1:47.8
Giant slalom—Dagmar Rom	1:29.6

North American

(At Banff, Alberta)

Downhill—Zeno Colo, Italy	2:03.3
Slalom—Zeno Colo	2:10.6
Combined downhill and slalom—Zeno Colo	0.0 pts.
Jumping—Arthur Devlin, Lake Placid, N. Y.	229.2 pts.
Cross-country (18 km.)—Hans Holaaes, Eugene, Oreg.	1:09:59
Combined—Noel Paul, Kimberley, B. C.	

WOMEN

Downhill—Janette Burr, Seattle	1:30.8
Slalom—Dagmar Rom, Austria	1:52.8
Combined downhill and slalom—Dagmar Rom	1.70 pts.

Long Jumps (Official American)

Year	Made by and place	Distance, in feet
1905	Gustave Bye, Red Wing, Minn.	106
1908	John Evenson, Ishpeming, Mich.	122
1910	August Nordby, Ishpeming, Mich.	140
1913	Lars Haugen, Steamboat Springs, Colo.	185
1917	Henry Hall, Steamboat Springs, Colo.	203
1919	Lars Haugen, Steamboat Springs, Colo.	214
1932	Hans Beck, Lake Placid, N. Y.	235
1934	John Elvrum, Big Pines, Calif.	240
1937	Alf Engen, Salt Lake City, Utah	242
1939	Alf Engen, Big Pines, Calif.	251
1939	Bob Roecker, Iron Mountain, Mich.	257
1941	Alf Engen, Iron Mountain, Mich.	267
1941	Torger Tokle, Leavenworth, Wash.	273
1942	Torger Tokle, Olympian Hill, Hyak, Wash.	288
1942	Torger Tokle, Iron Mountain, Mich.	289
1949	Joe Perrault, Iron Mountain, Mich.	297

National Championships

CLASSIC COMBINED

(At Berlin, N. H.)

Class A x-country—Olavi Alakulppi, Nansen S. C.	56:13
Class B x-country—Theodore Farwell, Syracuse U.	1:02:50
Class A combined—Gordon Wren, Steamboat Springs, Colo.	439.3 pts.
Class B combined—Robert Arsenault, New Hampshire U.	428.6 pts.

JUMPING

(At Duluth, Minn.)

	Jumps, in feet		Points
	1st	2d	
Class A—Olavi Kuronen, Finland	205	199	223.7
Class B—Dave Freeman, Iron Mountain, Mich.	194	190	219.2
Class C—Marvin Crawford, Steamboat Springs	169	172	201.2
Senior—George Kotlarek, Duluth S. C.	163	172	217.6

FOUR-EVENT

(At Portland, Oreg.)

Open class—Jon Lie, Norway	382.2 pts.
Amateur—Karl Martitsch, Austria	358.5 pts.

GIANT SLALOM

(At Norden, Calif.)

Men—Hans Senger, Austria	1:23.2
Women—Resli Hammerer, Austria	1:13.4

DOWNHILL AND SLALOM

(At Sun Valley, Idaho)

DOWNHILL

	Time
Amateur and Open (men)—Jim Griffith, Sun Valley S. C.	2:15
Amateur and Open (women)—Janette Burr, Sun Valley S. C.	2:05.1

MEN'S SLALOM

	1st run	2d run	Total
Amateur—Jack Reddish, Salt Lake S. T.	73.6	78.4	152.0
Open { Ernie McCullogh, Sun Valley S. C. } { Jack Reddish, Salt Lake S. T. }	75.2	76.8	152.0

WOMEN'S SLALOM

Amateur—Norma Godden, Salt Lake S. C.	55.4	50.4	105.8
Open—Georgette Thollere-Miller, France	48.0	48.6	96.6

COMBINED

Amateur (men)—Jack Reddish	278 pts.
Open (men)—Ernie McCullogh	272 pts.
Amateur and Open (women)—Lola Woodworth, Banff Ski Runners	271 pts.

Dan Netzell of Sweden holds the world long-jump record with a leap of 442.7 feet, made at Oberstdorf, Germany, on March 12, 1934.

BOWLING

THE GAME OF bowling that is the favorite sport of millions of "keglers" in the United States is an indoor modification of the more ancient outdoor game that survives as lawn bowling. The outdoor game is prehistoric in origin and probably goes back to Primitive Man and round stones that were rolled at some target. It is believed that a game something like nine-pins was popular among the Dutch, Swiss and Germans as long ago as A.D. 1200 at which time the game was played outdoors with an alley consisting of a single plank 12 to 18 inches wide along which was rolled a ball toward three rows of three pins each placed at the far end of the alley. When the first indoor alleys were built and how the game was modified from time to time are matters of dispute. Much of the confusion arises from a lack of certainty as to which game is meant, "bowls" or "bowling", one with a "jack" and the other with "pins", in historical passages.

It is supposed that the early settlers of New Amsterdam (New York City) being Dutch, they brought their two bowling games with them. About a century ago the game of nine-pins was flourishing in the United States but so corrupted by gambling on matches that it was barred by law in New York and Connecticut. Since the law specifically barred "nine-pins", it was eventually evaded by adding another pin and thus legally making it a new game. The genius who thought up that simple method of outwitting the law and putting a popular game in motion once more remained modestly anonymous. With the increase in the number of pins, the old diamond formation of nine-pins was abandoned for the triangle set-up of ten-pins that remains the rule to this day. Various organizations were formed to make rules for bowling and supervise competition in the United States but none was successful until the American Bowling Congress, organized Sept. 9, 1895, became the ruling body.

Bowling Statistics

Source: American Bowling Congress.

American Bowling Congress Records

Type of record	Holder	Score	Year
High team total.....	Birk Bros., Chicago.....	3234	1938
High team game.....	Tea Shop, Milwaukee.....	1186	1927
High doubles total.....	G. Zunker—F. Benkovic, Milwaukee.....	1415	1933
High doubles game.....	J. Gworek—H. Kmidowski, Buffalo.....	544	1946
High singles total.....	Larry Shotwell, Covington, Ky.....	774	1930
High all events total.....	Max Stein, Belleville, Ill.....	2070	1937
High 3 games in any event.....	Larry Shotwell, Covington, Ky.....	774	1930

AMERICAN BOWLING CONGRESS CHAMPIONS

Year	Singles	Score	Doubles	Score
1929	Ad Unke, Milwaukee, Wis.....	728	W. Klecz—P. Butler, Chicago, Ill.....	1353
1930	Larry Shotwell, Covington, Ky.....	774	J. Devine—G. Heup, Beloit, Mich.....	1339
1931	Walter Lachowski, Erie, Pa.....	712	E. Rafferty—C. Reilly, Philadelphia, Pa.....	1316
1932	Otto Nitschke, Cleveland, Ohio.....	731	F. Benkovic—C. Daw, Milwaukee, Wis.....	1358
1933	Earl Hewitt, Erie, Pa.....	724	G. Zunker—F. Benkovic, Milwaukee, Wis.....	1415
1934	Jerry Vidro, Grand Rapids, Mich.....	721	G. Rudolph—J. Ryan, Waukegan, Ill.....	1321
1935	Don Brokaw, Canton, Ohio.....	733	C. Summerix—H. Souers, Akron, Ohio.....	1348
1936	Charles Warren, Springfield, Ill.....	735	A. Slanina—M. Straka, Chicago, Ill.....	1347
1937	Gene Gagliardi, Mt. Vernon, N. Y.....	749	V. Gibbs, Kansas City, Mo.—N. Burton, Dallas, Texas	1359
1938	Knute Anderson, Moline, Ill.....	746	D. Johnson—F. Snyder, Indianapolis, Ind.....	1337
1939	Jim Danek, Forest Park, Ill.....	730	P. Icuss—M. Fowler, Steubenville, Ohio.....	1405
1940	Ray Brown, Terre Haute, Ind.....	742	H. Freitag—J. Sinka, Chicago, Ill.....	1346
1941	Fred Ruff, Belleville, Ill.....	745	W. Lee—R. Farness, Madison, Wis.....	1346
1942	John Stanley, Cleveland, Ohio.....	756	E. Nowicki—G. Balor, Milwaukee, Wis.....	1377
1946	Leo Rollick, Los Angeles, Calif.....	737	J. Gworek—H. Kmidowski, Buffalo, N. Y.....	1366
1947	Junie McMahon, Chicago.....	740	Ed Doerr, Jr.—Len Springmeyer, St. Louis.....	1350
1948	Lincoln Protich, Akron, Ohio.....	721	J. Towns—W. Sweeney, Chicago.....	1361
1949	Bernard Rusche, St. Bernard, Ohio.....	716	D. Van Boxel, Green Bay—E. Bernhardt, Sturgeon Bay	1395
1950	Frank L.	753	W.	1395

American Bowling Congress Champions (cont.)

Year	All-events	Score	Team	Score
1929	Otto Stein, Jr., St. Louis, Mo.	1974	Hub Recreation, Joliet, Ill.	3063
1930	George Morrison, Chicago, Ill.	1985	Graff & Son, Kalamazoo, Mich.	3100
1931	Mike Mauser, Youngstown, Ohio	1966	S & L Motor, Chicago, Ill.	3013
1932	Hugh Stewart, Cincinnati, Ohio	1980	Jefferson Clothiers, Dayton, Ohio	3102
1933	Gil Zunker, Milwaukee, Wis.	2060	Flaig Opticians, Covington, Ky.	3021
1934	Walt Reppenhagen, Detroit, Mich.	1972	Strohs, Detroit, Mich.	3089
1935	Ora Mayer, San Francisco, Calif.	2022	Wolfe Tire Service, Niagara Falls, N. Y.	3029
1936	John Murphy, Indianapolis, Ind.	2006	Falls City Hi-Bru, Indianapolis, Ind.	3089
1937	Max Stein, Belleville, Ill.	2070	Krakow Furniture, Detroit, Mich.	3118
1938	Don Beatty, Jackson, Mich.	1978	Birk Bros., Chicago, Ill.	3234
1939	Joe Wilman, Chicago, Ill.	2028	Fife Electric, Detroit, Mich.	3151
1940	Fred Fisher, Buffalo, N. Y.	2001	Monarch Beer, Chicago, Ill.	3047
1941	Harold Kelly, South Bend, Ind.	2013	Vogel Bros., Forest Park, Ill.	3065
1942	Stan Moskal, Saginaw, Mich.	1973	Budweiser, Chicago, Ill.	3131
1946	Joe Wilman, Chicago, Ill.	2054	Llo-da-mar Bowl, Santa Monica, Calif.	3023
1947	Junie McMahon, Chicago	1965	Eddie and Earl Linsz, Cleveland, Ohio	3032
1948	Ned Day, West Allis, Wis.	1979	Washington Shirts, Chicago	3007
1949	John Small, Chicago	1941	Jimmie Smith's, South Bend, Ind.	3027
1950	Frank Santore, Long Island City, N. Y.	1981	Pepsi-Cola, Detroit	2952

WOMAN'S INTERNATIONAL BOWLING CONGRESS CHAMPIONS

Source: Emma Phaler, Secretary, Woman's International Bowling Congress, Inc.

Year	Singles	Score	Doubles	Score
1929	Mrs. Agnes Higgins, Chicago	637	M. Smith—D. McQuade, Chicago	1123
1930	Anita Rump, Fort Wayne	613	F. Trettin—M. Warmbler, Chicago	1173
1931	Mrs. Myrtle Schulte, St. Louis	650	Z. Baker—G. Pomeroy, Detroit	1145
1932	Audrey McVay, Kansas City, Mo.	668	M. Frank—E. Kirg, Chicago	1218
1933	Mrs. Sally Twyford, Aurora, Ill.	628	V. Peters—M. Kite, Syracuse, N. Y.	1135
1934	Marie Clemensen, Chicago	712	F. Trettin—D. McQuade, Chicago	1190
1935	Marie Warmbler, Chicago	652	E. Haufier—B. Simon, San Antonio	1219
1936	Mrs. Ella Burmeister, Madison, Wis.	612	Mrs. A. Lindermann—Mrs. L. Baldy, Milwaukee	1116
1937	Mrs. Anna Gottstine, Buffalo	647	L. Franke—G. Weber, Fort Wayne	1230
1938	Mrs. Rose Warner, Waukegan, Ill.	622	F. Probert—E. Sablatnik, St. Louis	1215
1939	Helen Hongstler, Detroit	626	C. Powers—B. Reus, Grand Rapids	1130
1940	Mrs. Sally Twyford, Aurora, Ill.	626	T. Morris—D. Burmeister Miller, Chicago	1181
1941	Nancy Huff, Los Angeles	662	J. Pittinger—M. J. Hogan, Los Angeles	1155
1942	Tillie Taylor, Newark, N. J.	659	S. Hartrick—C. Allen, Detroit	1204
1946	Val Mikiel, Detroit	682	V. Focazio—P. Dusher, Niagara Falls, N. Y.	1251
1947	Agnes Junker, Indianapolis, Ind.	650	Candice Miller—E. Beard, Ft. Wayne, Ind.	1245
1948	Shirlee Wernecke, Chicago	696	M. Cass, Alhambra—M. Mathews, Long Beach, Calif.	1188
1949	Clara Mataya, St. Louis	658	Ann Elyasevich—Estelle Svoboda, Chicago	1229
1950	Cleo Stalkamp, Newport, Ky.	669	Shirley Gantenbein—Flo Schick, Dallas	1216

Year	All-events	Score	Team	Score
1929	Mrs. Emma Jaeger, Toledo	1700	Harvey's Market Sq. Rec., Kansas City	2538
1930	Mrs. Selva Twyford, Chicago	1727	Finucane Ladies, Chicago	2784
1931	Mrs. M. Schulte, St. Louis	1742	Alberti Jewelers, Chicago	2748
1932	Marie Warmbler, Chicago	1807	Martin Brett Realtors, St. Louis	2667
1933	Mrs. Sally Twyford, Aurora, Ill.	1765	Alberti Jewelers, Chicago	2864
1934	Mrs. Esther Ryan, Milwaukee	1763	Tommy Dolls Five, Cincinnati	2616
1935	Marie Warmbler, Chicago	1911	Alberti Jewelers, Chicago	2765
1936	Mrs. Ella Burmeister, Madison, Wis.	1683	Easty Five, Cleveland	2617
1937	Mrs. Louise Stockdale, Detroit	1761	The Heil Uniform Heat, Milwaukee	2685
1938	Dorothy Burmeister, Chicago	1843	The Heil Uniform Heat, Milwaukee	2706
1939	Ruth Troy, Dayton, Ohio	1724	Kornitz Pure Oil, Milwaukee	2618
1940	Mrs. Tess Morris, Chicago	1777	Logan Square Buicks, Chicago	2689
1941	Mrs. Sally Twyford, Aurora, Ill.	1799	Rovick Bowling Shoes, Chicago	2661
1942	Nina Van Camp, Chicago	1888	Logan Square Buicks, Chicago	2815
1946	Catherine Fellmoth, Chicago	1835	Silver Seal Soda, St. Louis	2721
1947	Marge Dardeen, Cincinnati	1826	Kornitz Pure Oil, Milwaukee	2987
1948	Virgie Hupfer, Burlington, Iowa	1850	Kathryn Creme Pact, Chicago	2812
1949	Cecelia Winandy, Chicago	1840	Gears by Enterprise, Detroit	2786
1950	Marion Ladewig, Grand Rapids, Mich.	1796	Fanitorium Majors, Grand Rapids, Mich.	2903

DUCK PINS

Source: A. L. Ebersole, Executive Secretary, National Duck Pin Bowling Congress.

WORLD RECORDS (MEN)

Individual	Score
Event and record holder	
Single game—Eddie Funaro, New Haven, Conn.	239
3-game set—Arthur Lemke, Lowell, Mass.	542
4-game set—John Miller-Nova Hamilton, Baltimore (tie)	619
5-game set—William Brozey, Baltimore	785
6-game set—Mike Dzladik, Derby, Conn.	912
7-game set—Howard Parsons, Washington, D. C.	1,091
8-game set—Herman Ferri, New Haven, Conn.	1,167
9-game set—Wally Pipp, Hartford, Conn.	1,318
10-game set—Wimpy Guerke, Baltimore	1,482
Season average—Nick Tronsky, New Britain, Conn.	134-14

Doubles

Single game—W. Christiano-J. Silk, Norwalk, Conn.	352
3-game set—R. Haines-A. Felter, Baltimore	918
4-game set—Dawson Snyder-James Rosenberger, Baltimore	1,122
5-game set—W. Esser-J. Dreisch, Baltimore	1,425
6-game set—N. Hamilton-W. Guerke, Baltimore	1,624
7-game set—S. Witkowski, Middletown, Conn.-J. Genovesi, Rockville, Conn.	1,938
8-game set—E. Campbell-L. Seim, Annapolis, Md.	2,128
9-game set—N. Hamilton-W. Guerke, Baltimore	2,431
10-game set—J. Dietsch-J. Weinkam, Baltimore	2,752
Season average—H. Hipsley-J. Dietsch, Baltimore	254-10

Teams

Single game—Winchester Packard, Washington, D. C.	797
3-game set—Hick's Cafe, Baltimore	2,123
5-game set—Kelly Buick, Baltimore	3,348
10-game set—Park Circle Motor, Baltimore	6,460
15-game set—Popular Club-Recreation, Baltimore	9,420
Consecutive wins—Franks Tavern, Washington, D. C.	33
Season average—National Beer, Baltimore	638-42
3-man game—Middletown (Conn.) All-Stars	475
3-man set—Huguey's Bethesda (Md.) Stars	1,249
3-man 5-game set—C. Hildebrand, E. Pickus, N. Hamilton, Baltimore	1,957

NATIONAL TOURNAMENT CHAMPIONS, 1950

	Score
All-events—Nova Hamilton, Baltimore	1,274
Singles—Hal Tucker, Baltimore	487
Doubles—William Stalcup-Cletus Pannell, Arlington, Va.	828
Team—Valley Forge Beer, Washington, D. C.	1,951
Mixed doubles—Elizabeth Barger-William Brozey, Baltimore	792

WORLD RECORDS (WOMEN)

Individual	Score
Event and record holder	
Single game—Ida Simmons Slack, Norfolk, Va.	203
3-game set—Flo Reynolds, Milford, Conn.	469
4-game set—Mrs. Ellen Holland, Norfolk, Va.	561
5-game set—Ida Simmons Slack, Norfolk, Va.	731
6-game set—Ida Simmons, Norfolk, Va.	835
7-game set—Ida Simmons Slack, Norfolk, Va.	992
8-game set—Elizabeth Barger, Baltimore	1,020
9-game set—Maxine Allen, Durham, N. C.	1,231
10-game set—Ida Simmons, Norfolk, Va.	1,355
Season average—Elizabeth Barger, Baltimore	124-2

Doubles

Single game—Hazel Wells-Ruby Hovanic, Bridgeport, Conn.	338
3-game set—A. Levy-D. Smith, Norfolk, Va.	798
4-game set—E. Brose-T. McDonough, Baltimore	966
5-game set—A. Mulaney-A. Lucas, Baltimore	1,252
6-game set—I. Simmons-E. Leib, Baltimore	1,458
7-game set—S. M. Easton-F. Oeschler, Baltimore	1,659
8-game set—T. McDonough-E. Brose, Baltimore	1,905
9-game set—I. Simmons-E. Leib, Baltimore	2,139
10-game set—E. Traber-M. Cleaveland, Atlanta, Ga.	2,354
Season average—N. Zimmerman-M. Tuckey, Baltimore	217

Teams

Single game—Dubner's-Franklin Girls, Baltimore	695
3-game set—Dubner's-Franklin Girls, Baltimore	1,887
5-game set—Lucky Strike Girls, Portsmouth, Va.	3,017
10-game set—Evening Star Champions, Washington, D. C.	5,438
Season average—Aristocrat Dairy, Baltimore	578-0
Consecutive wins—Bookies, Richmond, Va.	37
3-woman 7-game set—I. Simmons, J. White, E. Lieb, Baltimore	2,433

WOMEN

All-events—Doris Leigh, Portsmouth, Va.	1,121
Singles—Estelle Warrington, Atlanta, Ga.	399
Doubles—Eleanor Branch-Betty Smith, Norfolk, Va.	768
Team—Frederick Generator-Franklin, Baltimore	1,802

CONTRACT BRIDGE

Source: American Contract Bridge League

1950 Champions

SUMMER NATIONAL TOURNAMENT

Master pairs—Dr. C. W. Yorke-Manuel Sherwin, Flint, Mich.
 Master team-of-four—George Rapee, Samuel Stayman, Howard Schenken, New York; John Crawford, Philadelphia; Oswald Jacoby, Dallas, Texas.
 Master mixed team-of-four—Mr. and Mrs. Charles

J. Solomon, Mrs. R. G. Young, Philadelphia; Peter A. Leventritt, New York.
 Men's national pairs—Phillip A. Briggs-A. R. Revell, Chicago.
 Women's national pairs—Mrs. Merritt L. Thompson—Mrs. John Kelly, Indianapolis.

First Night Game in 1935

The first night game in the major leagues was played on May 24, 1935, at Crosley Field, Cincinnati, between the Reds and the Phillies. The Reds beat the Phils, 2-1, before 18,422 spectators.

West All-Star Victor

The Western All-Stars beat the East's representatives, 5-3, in the eighteenth East-West baseball game sponsored by the Negro American League and played in Comiskey Park, Chicago, last August.

Standard Measurements in Sports

BASEBALL

- Home plate to pitcher's box—60 feet 6 inches.
 Plate to second base—127 feet 3½ inches.
 Distance from base to base (home plate included)—90 feet.
 Size of bases—15 inches by 15 inches.
 Pitcher's plate—24 inches by 6 inches.
 Batter's box—6 feet by 4 feet.
 Home plate—17 inches by 17 inches, cut to a point at rear.
 Home plate to backstop—Not less than 60 feet.
 Weight of ball—Not less than 5 ounces nor more than 5¼ ounces.
 Circumference of ball—Not less than 9 inches nor more than 9¼ inches.
 Bat—Must be round, not over 2¾ inches in diameter at thickest part, nor more than 42 inches in length, and entirely of hardwood in one piece.

FOOTBALL

- * Length of field—120 yards.
 Width of field—53½ yards (160 feet).
 Height of goal posts—20 feet.
 Height of crossbar—10 feet.
 Width of goal posts—18 feet 6 inches, inside to inside, and not more than 19 feet 2 inches, outside to outside.
 Length of ball—11¼ inches (long axis).
 Circumference of ball—21.5 inches (middle); 28.5 inches (long axis).
 * Includes 10 yards of end zone on either side.

LAWN TENNIS

- Size of court—Rectangle 78 feet long and 27 feet wide (singles); 78 feet long and 36 feet wide (doubles).
 Height of net—3 feet in center, gradually rising to reach 3-foot 6-inch posts at each side of court.
 Ball—Shall be more than 2½ inches and less than 2¾ inches in diameter and weigh more than 2 ounces and less than 2½ ounces.
 Service line—21 feet from net.

POLO

- Playing Field—300 yards long by 200 yards wide, if unboarded; 300 by 160, if boarded. In addition, there is an area of about 10 yards from the sidelines and about 30 yards from the back lines known as the safety zone.
 Goals—8 yards wide and at least 10 feet high. The posts must be light enough to break if collided with.
 Ball—Should not exceed 3¼ inches in diameter and should weigh from 4¼ to 4¾ ounces. Usually made of wood, but experiments have been made with plastic balls.
 Ponies—No restrictions on height of mounts

GOLF

- Weight of ball—Not greater than 1.620 ounces.
 Size of ball—Not less than 1.680 inches in diameter.
 Velocity of ball—Not greater than 250 feet per second.
 Hole—Shall be 4¼ inches in diameter and at least 4 inches deep.
 Clubs—No restrictions on the size; 14 is the maximum number permitted in championship competition.

ICE HOCKEY

- Size of rink—200 feet long by 85 feet wide (desired size).
 Size of goal—6 feet wide by 4 feet in height.
 Puck—1 inch thick and 3 inches in diameter; made of vulcanized rubber; weight—6¼ ounces (unofficial).
 Length of stick—Not more than 53 inches from heel to end of shaft nor 14¾ inches from heel to end of blade. Blade should not exceed 3 inches in height, except goalkeeper's stick, which shall not exceed 3½ inches in height except at the heel, where it must not exceed 4½ inches.

BASKETBALL

(National Collegiate A. A. Rules)

- Playing court—94 feet long by 50 feet wide (maximum dimensions); 74 feet long by 42 feet wide (minimum dimensions).
 Baskets—Rings 18 inches in inside diameter, with white cord nets, 15 to 18 inches in length. Each ring is made of metal and is not more than ⅝ of an inch in diameter.
 Height of basket ring—10 feet.
 Weight of ball—Not less than 20 ounces nor more than 22.
 Circumference of ball—No greater than 30 inches and not less than 29½.
 Free-throw line—15 feet from the face of the backboard.

HORSESHOE PITCHING, 1950

World Title Tournaments

(At Murray, Utah, Aug. 7-12)

FINAL STANDING OF LEADERS

	W.	L.		W.	L.
Fernando Isals...	34	1	Dean Brown.....	27	8
Casey Jones.....	31	4	Ray Gatewood....	25	10
Ted Allen.....	31	4	Don Titcomb.....	24	11
Stan DeLeary....	30	5	Louis Dean.....	24	11
Lowell Gray.....	28	7	J. Johnson.....	23	12

WOMEN

Mrs. Pat DeLeary, Phoenix, Ariz.....	9	0
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A. A. U. Champions

Singles—Dale Carson, Baltimore
 Doubles—Clarence Stern-Albert Rambold, Westminster, Md.

BILLIARDS

APPARENTLY nobody knows where billiards originated. Some trace the game back to ancient Greece or early Egyptian days; others insist it originated in France or England in medieval times. Shakespeare must have believed the Egyptian tale, because in *Antony and Cleopatra* he has Cleopatra saying: "Let's to billiards; come, Charmian." There is an illustration of Louis XIV of France playing billiards in 1694 and using a shovel-shaped stick to set the "cue ball" in motion, from which it is evident that the pointed cue was a later development.

Certainly the game was popular in England and on the Continent in the 17th

and 18th centuries and early settlers in North America are supposed to have introduced the game here. How to apply "english" to a billard ball was discovered by Jack Carr, an Englishman, in 1820. A Frenchman named Mingaud is credited with having invented the "draw" shot at about the same time and also to have devised leather tips for wooden cues. Championship competition, amateur and professional, is a modern development in billiards. The first formal professional tournament held in the United States took place in New York in 1863 with eight players competing. The first three-cushion tournament was held in St. Louis in 1878.

Billiards Statistics

Source: Press Service Bureau, The Billiard Congress of America.

World 18.2 Balk-line Champions

1903-05 Maurice Vignaux	1908 George B. Sutton	1921-22 Jake Schaefer, Jr.	1927 Willie Hoppe
1906 George F. Slosson	1909 Ora C. Morningstar	1923-24 Willie Hoppe	1927 Welker Cochran
1906-07 George B. Sutton	1909 Calvin Demarest	1925 Edward Horemans*	1928 Edward Horemans
1907 Willie Hoppe	1910 Harry P. Cline	1925 Jake Schaefer, Jr.	1929-33 Jake Schaefer, Jr.
1907 Jacob Schaefer, Sr.	1910-20 Willie Hoppe	1926 Erich Hagenlacher	1934 Welker Cochran†
1908 George F. Slosson			

* Disputed match. Schaefer won play-off. † No competition since.

18.2 BALK-LINE RECORDS

Year	Holder	Points	Year	Holder	Points	
1925	Jake Schaefer, Jr.	High run (game).....	400	1925	Jake Schaefer, Jr.	High grand average match... 93.75
1925	Jake Schaefer, Jr.	High run match.....	432	1926	Jake Schaefer, Jr.	High run exhibition match... 525
1925	Jake Schaefer, Jr.	High Average.....	400	1926	Jake Schaefer, Jr.	High grand average 2400 pts. 120
1925	Jake Schaefer, Jr.	High grand average tournament.....	57.14	1926	Welker Cochran	High run exhibition..... 634

World 18.1 Balk-line Champions

1903-05 Maurice Vignaux	1908 Jacob Schaefer, Sr.	1909-11 Willie Hoppe	1914-26 Willie Hoppe
1906 Willie Hoppe	1908 George B. Sutton*	1912 George B. Sutton	1926-27 Jake Schaefer, Jr.
1907 George B. Sutton	1908 George F. Slosson	1913 Ora C. Morningstar	1927 Willie Hoppe†
1907 Willie Hoppe			

* By forfeit. † No competition since.

18.1 BALK-LINE RECORDS

Year	Holder	Points	Year	Holder	Points
1926	Jake Schaefer, Jr.... High run in match play....	212	1927	Welker Cochran.... High run in exhibition....	353
1926	Jake Schaefer, Jr.... High single average in match play.....	60	1927	Welker Cochran.... High single average in exhibition.....	150
1926	Jake Schaefer, Jr.... High grand average in match play.....	36	1927	Welker Cochran.... High grand average in exhibition.....	61

FINAL STANDINGS IN 1950 NATIONAL CHAMPIONSHIP TOURNAMENTS

(At Chicago)

Pocket

	W	L	HR	BG	TP
*Irving Crane, Binghamton, N. Y.	9	2	107	2	1620
Willie Mesconi, Barrington, N. J.	9	2	141	3	1522
Joe Canton, Watervliet, N. Y.	8	3	93	8	1365
Joe Diehl, Rockford, Ill.	7	4	66	8	1364
Onofrio Lauri, Brooklyn	6	5	91	9	1382
Andrew Ponzi, Philadelphia	6	5	75	8	1382
Willis Covington, Milwaukee	6	5	102	8	1288
Basil Minickene, New York	5	6	53	15	1212
Buddy Wallace, Cleveland	4	7	83	11	1092
Al Coslosky, Philadelphia	3	8	56	10	967
Joe Cosgrove, Atlanta	2	9	40	16	918
Don DeCoy, Los Angeles	1	10	62	25	825

* Won title on total points.

Three Cushions

	W	L	HR	BG	TP
Joe Chamaco, Mexico City	8	2	7	35	471
Harold Worst, Grand Rapids	7	3	7	42	430
Ray Kilgore, Los Angeles	6	4	8	53	427
John Fitzpatrick, Los Angeles	6	4	8	42	424
Dan McGorty, San Francisco	2	8	6	56	399
Harold Roof, New York	1	9	6	68	401

INTERCOLLEGIATE CHAMPIONS, 1950

Three-cushion—Walter Johnson, Ohio State
Pocket—Leroy Kinman, E. Kentucky State College

Keyshot Team

Three-cushion—Ohio State
Pocket—Ohio State

World Three-cushion Champions

1878	Leon Magnus	1912	John Horgan	1919	R. L. Cannafax	1933	Welker Cochran
1899	W. H. Catton	1913-14	Alfredo DeOro	1920	John Layton	1934	John Layton
1900	Eugene Carter	1915	George Moore	1921	Augie Kieckhefer	1935	Welker Cochran
1900	Lloyd Jevne	1915	William H. Huey	1921-23	John Layton	1936	Willie Hoppe
1907	Harry P. Cline	1916	Alfredo DeOro	1923	Tiff Denton	1937	Welker Cochran
1908	John Daly	1916	Charles Ellis	1924	R. L. Cannafax	1938	Welker Cochran
1908	Thomas Hueston	1916	Charles McCourt	1925	R. L. Cannafax	1939	Joe Chamaco
1908-09	Alfredo DeOro	1916	Hugh Heal	1926-27	Otto Reisel	1940-44	Willie Hoppe
1910	Fred Eames	1916	George Moore	1927	Augie Kieckhefer	1944	Welker Cochran
1910	Alfredo DeOro	1917	Charles McCourt	1928	Otto Reisel	1945-46	Welker Cochran
1910	John Daly	1917	R. L. Cannafax	1928-29	John Layton	1947	Willie Hoppe
1910	Thomas Hueston	1917-18	Alfredo DeOro	1930	John Layton	1948	Willie Hoppe
1911	John Daly	1918-19	Augie Kieckhefer	1931	Arthur Thurnblad	1949	Willie Hoppe
1911	Alfredo DeOro	1919	Alfredo DeOro	1932	Augie Kieckhefer	1950	Willie Hoppe
1912	Joe Carney						

THREE-CUSHION RECORDS

High Runs				High Averages—Best Game			
Year	Holder	Event	Points	Year	Holder	Points	Event
1915	Charles Morfin	Tournament (Pro)	18	1925	Otto Reisel	50 in 16 innings	Interstate League
1919	Tiff Denton	Tournament (World)	17	1925	Otto Reisel	100 in 57 innings	Interstate League
1926	John Layton	Interstate League	18	1925	Otto Reisel	150 in 104 innings	Interstate League
1927	Willie Hoppe	American League	20	1930	John Layton	50 in 23 innings	Tournament
1928	Willie Hoppe	Exhibition vs. C. C. Peterson	25	1939	Joe Chamaco	50 in 23 innings	National League*
1930	Gus Copulos	Tournament (World)	17	1940	Jay N. Bozeman	50 in 23 innings	Tournament†
1936	Willie Hoppe	Match play	15	1945	Willie Hoppe	50 in 20 innings	Tournament‡
1939	Joe Chamaco	National League*	18	1945	Welker Cochran	60 in 20 innings	Match
1940	Tiff Denton	Tournament†	17	1947	Willie Hoppe	60 in 21 innings	Match‡
1945	Willie Hoppe	Match play‡	20				

* No safeties. † Safeties. ‡ No safeties; optional cue ball first shot of inning.

* No safeties. † Safeties. ‡ No safeties; optional cue ball first shot of inning.

World Pocket Billiard Champions

1878-80	Cyrille Dion	1899-1900	Alfredo DeOro	1910	Jerome Keogh	1935	Andrew Ponzi
1881	Gottlieb Wahlstrom	1901	Frank Sherman	1910-12	Alfredo DeOro	1936	James Caras
1882-83	Albert Frey	1901	Alfredo DeOro	1912	R. J. Ralph	1937	Ralph Greenleaf
1884	J. L. Malone	1902	William Clearwater	1913	Alfredo DeOro	1938	James Caras
1886-87	Alfred Frey	1902	Grant Eby	1913-15	Bennie Allen	1939	James Caras
1887	J. L. Malone (f)	1903	Alfredo DeOro	1916	John Layton	1940	Andrew Ponzi (l)
1887-88	Alfredo DeOro	1904	Alfredo DeOro	1916-18	Frank Taberski	1941	Willie Mosconi (l)
1888	Frank Powers	1905	Jerome Keogh (f)	1919-24	Ralph Greenleaf	1941	Erwin Rudolph (t)
1889	Albert Frey	1905	Alfredo DeOro	1925	Frank Taberski	1942	Irving Crane (m)
1889	Alfredo DeOro	1905	Thomas Hueston (f)	1926	Ralph Greenleaf	1942	Willie Mosconi (t)
1890	H. Manning	1906	Thomas Hueston	1926	Erwin Rudolph	1943	Andrew Ponzi (m)
1891	Frank Powers (f)	1906	John Horgan	1926	Thomas Hueston	1944	Willie Mosconi (m)
1892-94	Alfredo DeOro	1906	Jerome Keogh	1927	Frank Taberski	1945	Willie Mosconi
1895	William Clearwater	1907	Thomas Hueston	1927-28	Ralph Greenleaf	1946	Willie Mosconi
1895	Alfredo DeOro	1908	Thomas Hueston	1928	Frank Taberski	1946	Irving Crane (t)
1896	Frank Stewart (f)	1908	Frank Sherman	1929	Ralph Greenleaf	1947	Willie Mosconi (m)
1897	Grant Eby	1908	Alfredo DeOro	1929	Frank Taberski	1948	Willie Mosconi (m)
1897	Jerome Keogh	1909	Charles Weston	1930	Erwin Rudolph	1949	Jimmy Caras (t)
1898	William Clearwater	1909	John Kling	1930-32	Ralph Greenleaf	1950	Willie Mosconi (t)
1898	Jerome Keogh	1910	Thomas Hueston	1933-34	Erwin Rudolph		

(f) Forfeited. (l) League play. (t) Tourney. (m) Match.

POCKET BILLIARD RECORDS (14.1 Championship Game)

Event	Points	Holder	Year	Event	Points	Holder	Year
Tournament—high run	126	Ralph Greenleaf	1929	Tournament—best game in			
Tournament—high run	125	Bennie Allen	1935	innings	2	Ralph Greenleaf	1929†
Tournament—high run	125	George Kelly	1935	Tournament (national)—best			
Tournament—high run	125	Willie Mosconi	1945	game in innings	2	Irving Crane	1949
Exhibition—high run	309	Irving Crane	1939	Match—high run for single			
Exhibition—high run	309	Willie Mosconi	1945	game	127	Willie Mosconi	1945
Tournament—high single				Match—high run for single			
game average	63	Ralph Greenleaf	1929	game	127	James Caras	1946
Tournament—high grand				Match—high run in continu-			
average	18.34	Willie Mosconi	1950	ous play	153	Andrew Ponzi	1934

* 4½ by 9 table. † Tied by Willie Mosconi in 1946.

National Amateur 18.2 Balk-line Champions

1909—H. A. Wright	1916—C. Huston	1923—Percy Collins†	1929—M. C. Walgren†
1910—Z. W. Gardner	1917—Dave McAndless	1924—E. T. Appleby	1930—Percy Collins
1911—J. F. Poggenburg	1918—Percy Collins	1925—F. S. Appleby	1931—E. T. Appleby
1912—M. D. Brown	1919—C. Heddon	1926—28—John Clinton	1932—Albert Poensgen‡
1913—Joseph Mayer	1920—E. T. Appleby	1929—E. T. Appleby†	1933—Albert Poensgen‡
1914—E. W. Gardner	1921—Percy Collins	1929—Percy Collins‡	1934—40—Edmund Sousa
1915—Nathan Hall	1922—E. T. Appleby*		

* International champion. † National 18.1 champion—F. S. Appleby. ‡ Amateur Billiard Association. § International champion.

National Amateur Three-cushion Champions

1910—Pierre Maupome	1925—26—Dr. A. J. Harris	1930—R. B. Harper	1945—46—C. T. Vandenovert†
1911—Charles Morin	1927—Dr. L. P. Macklin	1931—Frank Flemming	1946—Edward Lee†
1919—Arthur Newman	1928—J. N. Bozeman	1931—35—Edward Lee	1946—Robert M. Lord†
1920—W. B. Huey	1929—Charles Jordan	1936—Edward Lee*	1947—Robert M. Lord†
1921—Earl Lookabaugh	1929—Max Shimon	1937—A. Primeau	1948—Robert M. Lord†
1922—Frank Flemming	1930—Joseph Hall	1938—Gene Deardorff	1948—C. T. Vandenovert†
1923—Robert M. Lord	1930—Max Shimon	1939—Gene Deardorff	1948—49—Edward Lee†
1924—Frank Flemming			

* World champion. † Events limited to athletic clubs. ‡ Match.

National Amateur Pocket Billiard Champions

1912—A. Hyman	1925—Carl A. Vaughan	1930—J. H. Shoemaker	1933—E. Fagin
1913—J. H. Shoemaker	1926—Clarence Hurd	1931—Robert Cole	1933—J. H. Shoemaker*
1914—No tournament	1927—J. H. Shoemaker	1931—J. H. Shoemaker*	1934—35—J. H. Shoemaker
1915—22—J. H. Shoemaker	1928—J. Collins	1932—E. Fagin	1936—37—E. C. Rogers
1923—E. F. Reynolds	1929—Cy. Yellin	1932—J. H. Shoemaker*	1938—40—Arthur Cranfield
1924—J. H. Shoemaker			

* By challenge.

FINAL STANDINGS IN 1950 WORLD CHAMPIONSHIP TOURNAMENTS

Three Cushions								Pocket							
	W	L	HR	BG	TP	TI	GA		W	L	HR	BG	TP	TI	GA
*Hoppe.....	5	1	12	28	297	222	1.33†	*Mosconi.....	4	2	96	5	642	35	18.34
Chamaco.....	5	1	6	41	283	325	.97	Crane.....	4	2	86	4	656	44	14.89
Kilgore.....	1	5	8	50	251	292	.85	Diehl.....	2	4	114	5	545	81	6.7
Worst.....	1	5	7	62	239	296	.80	Canton.....	2	4	54	13	498	73	6.8

* Won title in play-off. † World tournament record. Key to abbreviations—W—won; L—lost; HR—high run; BG—best game; TP—total points; TI—total innings; GA—grand average.

BOYS' CLUBS OF AMERICA CHAMPIONS, 1950

Senior—Jerry Tiernan, Brooklyn

Junior—Charles Santoro, Philadelphia

Team—Flatbush Boys' Club, Brooklyn

OTHER TABLE TENNIS CHAMPIONS, 1950

United States

SINGLES

Junior—James Tancill, St. Louis

Junior girls—Joanne Gardner, Columbus, Ohio

Boys—Alphonse Hoftman, St. Louis

Seniors—Tibor Hazi, Washington, D. C.

DOUBLES

Women—Mrs. Magda Rurac, Los Angeles—Mildred Shaihan, Everett, Mass.

Mixed—Mrs. Sally Green Prouty, Chicago—Johnny Leach, England

Seniors—Jack Carrington, England—Bernard Hock, New Albany, Ind.

English Open Champions

Singles—Richard Bergmann, England

Women's singles—Mildred Shaihan, United States

Doubles—S. Dlinar-V. Harangozo, Yugoslavia

Women's doubles—Diane and Rosalind Rowe, England

Mixed doubles—John Leach—Miss P. Franks, England

WEIGHT LIFTING, 1950

World Champions

Bantamweight—Kamel Mahgoub, Egypt
 Featherweight—Mahmoud Fayad, Egypt
 Lightweight—Joe Pitman, United States
 Middleweight—Khadre el Touny, Egypt
 Light heavyweight—Stan Stanczyk, U. S.
 Heavyweight—John Davis, United States
 Team—United States (18 pts.)

National A. A. U. Champions

	Pts.
Bantamweight—Joe De Pietro, Paterson, N. J.....	635
Featherweight—Richard Greenawalt, Columbus, Ohio..	640
Lightweight—Joe Pitman, York, Pa.....	765
Middleweight—Pete George, Akron, Ohio.....	835
Light heavyweight—Stan Stanczyk, York, Pa.....	910
Heavyweight—John Davis, Brooklyn.....	1,010
Team—York (Pa.) Barbell Club.....	18

Volleyball Title to Chicago Y

The Chicago North Y. M. C. A. volleyball team won the 1950 National A. A. U. championship tournament, held in Cincinnati last May.

DOG SHOWS

Source: The American Kennel Club.

Morris and Essex Kennel Club Exhibition
(Madison, New Jersey)

Year	Best in show	Breed	Owner
1927	Ch. Higgins' Red Pat.	Irish setter.	William W. Higgins
1928	Ch. Delf Discriminate of Pinegrade.	Sealyham terrier.	Pinegrade Kennels
1929	Ch. Little Emir.	Pomeranian.	Mrs. V. Matta
1930	Ch. Weltona Frizette of Wildoaks.	Fox terrier, wire.	Mr. and Mrs. R. C. Bondy
1931	Ch. Fionne v Loheland of Walnut Hall.	Great dane.	Harkness Edwards
1932	Ch. Lone Eagle of Earlsmoor.	Fox terrier, wire.	Dr. and Mrs. S. Milbank
1933	Eppingville of Blarney.	Fox terrier, wire.	John G. Bates
1934	Ch. Gunsida Babs of Hollybourne.	Sealyham terrier.	S. L. Froelich
1935	Ch. Milson O'Boy.	Irish setter.	Mrs. Cheever Porter
1936	Ch. Mr. Reynal's Monarch.	Harrier.	Amory L. Haskell
1937	Ch. Sturdy Max.	English setter.	Maridor Kennels
1938	Ch. Ideal Weather.	Old English sheep dog.	Leonard Collins
1939	Ch. My Own Brucie.	Cocker spaniel.	H. E. Mellenthin
1940	Ch. Blakeen Jung Frau.	Poodle, standard.	Blakeen Kennels
1941	Ch. Nornay Saddler.	Fox terrier, smooth.	Wissaboo Kennels
1942-45	No shows		
1946	Ch. Benbow's Beau.	Cocker spaniel.	Robert A. Gusman
1947	Rock Ridge Night Rocket.	Bedlington terrier.	Mr. and Mrs. W. A. Rockefeller
1948	Ch. Rock Ridge Night Rocket.	Bedlington terrier.	Mr. and Mrs. W. A. Rockefeller
1949	Ch. Walsing Winning Trick of Edgerstoune.	Scottish terrier.	Mrs. John G. Winant
1950	Ch. Tyronne Farm Clancy.	Irish setter.	Jack Spear

Westminster Kennel Club Exhibition
(Madison Square Garden, New York, N. Y.)

Year	Best in show	Breed	Owner
1907-09	Ch. Warren Remedy.	Fox terrier, smooth.	Winthrop Rutherford
1910	Ch. Sabine Rarebit.	Fox terrier, smooth.	Sabine Kennels
1911	Ch. Tickle Em Jock.	Scottish terrier.	A. Albright, Jr.
1912	Ch. Kenmore Sorceress.	Airedale terrier.	William P. Wolcott
1913	Ch. Strathway Prince Albert.	Bulldog.	Alex H. Stewart
1914	Ch. Brentwood Hero.	Old English sheep dog.	Mrs. Tyler Morse
1915	Ch. Matford Vic.	Fox terrier, wire.	George W. Quintard
1916	Ch. Matford Vic.	Fox terrier, wire.	George W. Quintard
1917	Ch. Conejo Wycollar Boy.	Fox terrier, wire.	Mrs. Roy A. Rainey
1918	Ch. Haymarket Faultless.	Bull terrier.	R. H. Elliot
1919	Ch. Briergate Bright Beauty.	Airedale terrier.	G. L. L. Davis
1920	Ch. Conejo Wycollar Boy.	Fox terrier, wire.	Mrs. Roy A. Rainey
1921	Ch. Midkiff Seductive.	Cocker spaniel.	William T. Payne
1922	Ch. Boxwood Barkentine.	Airedale terrier.	Frederic C. Hood
1923	No best in show award		
1924	Ch. Barberryhill Bootlegger.	Sealyham terrier.	Bayard Warren
1925	Ch. Governor Moscow.	Pointer.	Robert F. Maloney.
1926	Ch. Signal Circuit.	Fox terrier, wire.	Halleston Kennels
1927	Ch. Pinegrade Perfection.	Sealyham terrier.	Frederic C. Brown
1928	Ch. Talavera Margaret.	Fox terrier, wire.	R. M. Lewis
1929	Land Loyalty of Bellhaven.	Collie.	Mrs. Florence B. Ilch
1930	Ch. Pendley Calling of Blarney.	Fox terrier, wire.	John G. Bates
1931	Ch. Pendley Calling of Blarney.	Fox terrier, wire.	John G. Bates
1932	Ch. Nancolleth Markable.	Pointer.	Giralda Farms
1933	Ch. Warland Protector of Shelterock.	Airedale terrier.	S. M. Stewart
1934	Ch. Flornell Spicy Bit of Halleston.	Fox terrier, wire.	Halleston Kennels
1935	Ch. Nunsoe Duc de la Terrasse of Blakeen.	Poodle.	Blakeen Kennels
1936	Ch. St. Margaret Magnificent of Clairedale.	Sealyham terrier.	Clairedale Kennels
1937	Ch. Flornell Spicy Piece of Halleston.	Fox terrier, wire.	Halleston Kennels
1938	Daro of Maridor.	English setter.	Maridor Kennels
1939	Ferry v. Rauffelsen of Giralda.	Doberman pinscher.	Giralda Farms
1940	Ch. My Own Brucie.	Cocker spaniel.	H. E. Mellenthin
1941	Ch. My Own Brucie.	Cocker spaniel.	H. E. Mellenthin
1942	Ch. Wolvey Pattern Edgerstoune.	West Highland terrier.	Mrs. John G. Winant
1943	Ch. Pitter Patter of Piperscroft.	Miniature poodle.	Mrs. P. H. B. Frelinghuysen
1944	Ch. Flornell Rare-Bit of Twin Ponds.	Welsh terrier.	Mrs. Edward P. Alker
1945	Shieling's Signature.	Scottish terrier.	Mr. and Mrs. T. H. Snethen
1946	Ch. Hetherington Model Rhythm.	Fox terrier, wire.	Mr. and Mrs. T. H. Carruthers III
1947	Ch. Warlord of Mazelaine.	Boxer.	Mr. and Mrs. R. C. Kettles, Jr.
1948	Ch. Rock Ridge Night Rocket.	Bedlington terrier.	Mr. and Mrs. W. A. Rockefeller
1949	Ch. Mazelaine's Zazarac Brandy.	Boxer.	Mr. and Mrs. John P. Wagner
1950	Ch. Walsing Winning Trick of Edgerstoune.	Scottish terrier.	Mrs. John G. Winant

CYCLING

THE ORIGIN and early history of the sport of cycling probably should be sought in the law volumes that contain the court records of decisions in patent cases. There was much dispute and litigation over the priority of inventions and improvements in the development of the bicycle. The fundamental idea of a wheeled frame on which a man could stand or sit and propel himself along a road goes back as far as the time of the Ptolemies in Egypt, but nothing progressive was done about it until a Frenchman named de Sivrac, in 1769, invented a tricycle on which he sat and rolled along by pushing his feet against the ground. There were various two-wheeled and three-wheeled improvements developed by French, German and English experimenters in the next century or so. The frames were better; steering with the front wheel was a new feature; handlebars were of more convenient design and adjustable seats were added. But the rider still pushed himself along with his feet until, about 1820, somebody had the bright idea of rotating the front wheel with a geared device, the rider furnishing the power by

pushing and pulling handlebars mounted on a spindle. Pedals came along about 1840 and, in the case of bicycles, were attached to the front wheel that grew to be much larger than the rear wheel. Solid rubber tires began to replace iron tires in 1869.

There was a long legal dispute about credit for the invention of the "safety bicycle" with two wheels of equal size and pedals attached to a sprocket that, through gears and a chain, applied power to the rear wheel but, in any case, the "safety" or modern bicycle had just about driven the old "high-wheeler" off the roads by 1890. Pneumatic tires were invented in 1888 by J. B. Dunlop, a Scotsman who was a practising veterinarian in Belfast, Ireland, and in a few years all the better bicycles were using pneumatic tires. But when Dunlop tried to patent his invention, it was discovered that a stranger named R. W. Thomson had taken out an English patent on such an idea in 1845. The Pickwick Bicycle Club, founded in London, 1870, was the first bicycle organization. The League of American Wheelmen was organized in 1880.

WORLD RECORDS

Source: Otto Elsele, Associate Editor, *American Bicyclist*.

The Union Cycliste Internationale, world ruling body, made new provisions in 1948 for the setting of bicycle track records. Old records, now discarded, were based on the measuring line being 30 centimeters (11.8 inches) from the inside of the track. The new code calls for the measuring line to be 20 centimeters (7.8 inches) from the inside. Only six basic distances are now permitted, with the marks separated into two classes—amateur and professional. New standards were compiled from the old on the basis of the measuring line being 20 centimeters. No amateur world records have been announced.

OUTDOOR PROFESSIONAL

Unpaced Standing Start

Distance	Holder and country	Where made	Year	Time
1 kilometer	R. H. Harris, Great Britain	Milan	1949	1:09 $\frac{4}{5}$
5 kilometers	F. Battesini, Italy	Milan	1938	6:21
10 kilometers	M. Archambaud, France	Milan	1937	12:53
20 kilometers	M. Archambaud, France	Milan	1937	25:59 $\frac{3}{5}$
100 kilometers	M. de Benedetti, Italy	Milan	1942	2:20:44 $\frac{4}{5}$
1 hour	F. Coppi, Italy	Milan	1942	28 mi. 805 yd.

INDOOR PROFESSIONAL

Unpaced Standing Start

1 kilometer	R. H. Harris, Great Britain	Brussels	1950	1:07
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Motor-Paced*

1 hour	J. Lohmuller, Switz.	Paris	1948	44 mi. 78 yd.
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* Third U. C. I. regulations (1933, etc.).

FORMER WORLD RECORDS

Unpaced Flying Start

Distance	Holder and country	Where made	Year	Time
$\frac{1}{4}$ mile	Ivor Lawson, United States	Salt Lake City	1906	0:23 $\frac{4}{5}$
500 meters	L. Michard, France	Bordeaux	1932	0:29 $\frac{4}{5}$
$\frac{1}{2}$ mile	A. J. Clark, Australia	Saltair, Utah	1908	0:50 $\frac{2}{5}$
1 kilometer	F. Battesini, Italy	Milan	1938	1:04 $\frac{3}{5}$
$\frac{3}{4}$ mile	Percy Lawrence, United States	Saltair, Utah	1908	1:23 $\frac{3}{5}$
1 mile	Alfred Gouillet, Australia	Salt Lake City	1912	1:51

Unrestricted Motor-Paced

			Miles	Yards
12 hours	Hubert Opperman, Australia	Melbourne	1932	477
24 hours	Hubert Opperman, Australia	Melbourne	1932	860
				367

Unpaced Standing Start

¼ mile.....	L. Faucheux, France.....	Arcachon.....	1936.....	0:27 4/5
500 meters.....	L. Faucheux, France.....	Bordeaux.....	1934.....	0:33 4/5
1 mile.....	L. Faucheux, France.....	Bordeaux.....	1931.....	0:56 1/5
1 kilometer.....	F. Battesini, Italy.....	Milan.....	1938.....	1:10
¾ mile.....	G. Renaudin, France.....	Bordeaux.....	1938.....	1:28
1 mile.....	G. Renaudin, France.....	Bordeaux.....	1938.....	2:00 3/5

Human Paced—Standing Start

				Time
¾ mile.....	J. S. Johnson, United States.....	Catford, England.....	1896.....	0:54 2/5
1 kilometer.....	R. Pottier, France.....	Paris.....	1904.....	1:08 1/5
¾ mile.....	J. W. Stocks, Great Britain.....	London.....	1897.....	1:18 2/5
1 mile.....	Major Taylor, United States.....	Manhattan Beach, N. Y.....	1898.....	1:41 2/5
50 miles.....	R. Palmer, Great Britain.....	London.....	1897.....	1:34:45 4/5

Hour Records

				Miles	Yards
Unpaced.....	F. Coppi, Italy.....	Milan.....	1942.....	28	805
Human-paced.....	J. W. Stocks, Great Britain.....	London.....	1897.....	32	1,085
Motor-paced (u).....	Leon Vanderstuyft, Belgium.....	Monthéry.....	1928.....	76	504
Motor-paced*.....	H. Breaux, France.....	Monthéry.....	1926.....	58	156
Motor-paced†.....	H. Grant, Great Britain.....	Paris.....	1932.....	56	929

(u) Unrestricted motor paced. * First U. C. I. regulations (1920-29). † Second U. C. I. regulations (1930, etc.).

WORLD CHAMPIONS, 1950

Amateur sprint—Maurice Verdeun, France
 Pro. sprint—Reginald H. Harris, England
 Amateur pursuit—Sid Patterson, Australia
 Pro. pursuit—Antonio Bevilacqua, Italy
 Amateur road—Jack Hoobin, Australia
 Pro. road—Alberic Schotte, Belgium
 Pro. motor-paced—Raoul Lesueur, France

U. S. AMATEUR CHAMPIONS, 1950

Senior—Robert Pfarr, Kenosha, Wis.
 Junior—Harry Backer, San Diego, Calif.
 Girls'—Doris Travani, Detroit
 Mile—Steve Hromjak, Cleveland
 2 miles—Robert Travani, Detroit
 5 miles—Gus Gatto, San Jose, Calif.
 10 miles—Alfred Stiller, Chicago

NATIONAL AMATEUR CHAMPIONS

Source: Amateur Bicycle League of America, Inc.

Year	Winner	Where held	Year	Winner	Where held
1921	Arthur Nieminsky, New York.....	Washington, D. C.	1936	Jackie Simes, New Jersey.....	St. Louis
1922	Carl Hambacher, New Jersey.....	Atlantic City	1937	Charles Bergna, New Jersey.....	Buffalo
1923	Charles Barclay, California.....	Chicago	1939	Martin Deras, California.....	Columbus
1924	Charlie Winter, New York.....	Buffalo	1940	Furman Kugler, New Jersey.....	Detroit
1925	Edward Merkner, Illinois.....	St. Louis	1941	Marvin Thomson, Illinois.....	Pasadena, Calif.
1926	Edward Merkner, Illinois.....	Philadelphia	1945	Ted Smith, New York.....	Chicago
1927	Jimmy Walthour, Jr., New York.....	Louisville	1946	Don Hester, California.....	Columbus
1928	R. J. Connor, District of Columbia.....	Kenosha, Wis.	1947	Ted Smith, New York.....	Philadelphia
1929	Sergio Matteini, New York.....	Newark, N. J.	1948	Ted Smith, New York.....	Kenosha, Wis.
1930	Bobby Thomas, Wisconsin.....	Kenosha, Wis.	1949	James Lauf, Maryland.....	San Diego, Calif.
1935	Cecil Hursey, Georgia.....	Atlantic City	1950	Robert Pfarr, Wisconsin.....	New Brunswick

AMATEUR BICYCLE LEAGUE OF AMERICA RECORDS

Source: George Knopf, Chairman, Records Committee, A.B.L.A.

ROAD COMPETITION—SCRATCH

Distance, mi.	Time	Record-holder and where made	Date
1/4	:29 2/5	B. W. King, Atlantic City, N. J.	Sept. 16, 1922
1/3	:38 3/5	Charles Winters, Chicago, Ill.	Sept. 8, 1923
1/2	1:04 3/5	John Leahy, Louisville, Ky.	Sept. 11, 1927
1	2:02	Henry Surman.....	
		R. L. Guthridge.....	
		S. C. Haberle.....	Aug. 8, 1908
2	4:46 1/5	Theodore Becker, Louisville, Ky.	Sept. 10, 1927
3	7:18 2/5	Don Sheldon, Columbus, Ohio	Aug. 18, 1946
5	11:59 2/5	Jack Held, Columbus, Ohio	Aug. 17, 1948
10	23:59 1/5	Don Hester, Columbus, Ohio	Aug. 17, 1946
15	48:40 2/5	Jackie W. Simes, Jr., Washington, D. C.	Oct. 11, 1936
20	45:22	A. E. Wahl, Buffalo, N. Y.	July 4, 1921
25	1:02:14	Charles R. Thomas, Tonawanda, N. Y.	Sept. 6, 1937
50	2:02:00	Leo Adams, Buffalo, N. Y.	July 14, 1935
100	4:33:25 1/5	Louis Matlese, Union City, N. J., to South Philadelphia, Pa.	June 6, 1926
125	6:20:20 4/5	Don Sheldon, Old Westbury, N. Y.	Oct. 19, 1947

POLO

POLO originated "somewhere east of Suez" but exactly where never has been determined. There is pictorial proof that it was played many centuries ago in Persia, Japan, China and Tibet, but it reached England by way of a border tribe in India known as the Manipuri. British army officers in India, about 1860, found the Manipuri playing polo and learned the game from them. The fact that the Manipuri used small native horses—they had no others—was the reason for the early height limit (14 hands) on polo mounts, from which arose the custom of calling them "polo ponies," which was abandoned in 1919.

In 1869 some officers of the 10th Hussars, returning from India, introduced the game in England and informal games were played with as many as eight players on a side. Formal competition at Hurlingham, the great shrine of the game, began in 1876 with five players on a side, which

number was cut to four in 1882. In 1894 an outstanding English player by the name of John Watson invented the backhand stroke and much improved the tactics of the game.

James Gordon Bennett, Jr., noted American newspaper owner and editor, saw polo at Hurlingham in 1875, brought the implements to this country, had a carload of cow ponies sent up from Texas and promoted a game that was played indoors at the Dickel Riding Academy at Fifth Avenue and 39th Street, New York City, in 1876. Polo moved outdoors to the Jerome Park race course and other suitable places soon after. One field on which it was played, at Fifth Avenue and 110th Street, was taken over by the New York baseball team in the National League and that is why the field on which the "Giants" play ball, although there since have been two changes in site, still is called "the Polo Grounds."

Polo Statistics

Source: United States Polo Association.

INTERNATIONAL MATCHES

Great Britain vs. United States

- | | |
|--|--|
| <p>1886 Won by Great Britain (10-4, 14-2) at Newport, R. I. Great Britain: No. 1, Capt. T. Hone; No. 2, Hon. R. Lawley; No. 3, Capt. Malcolm Little; Back, John Watson. United States: No. 1, Winthrop K. Thorne; No. 2, R. Belmont; No. 3, Foxhall P. Keene; Back, Thomas Hitchcock.</p> | <p>1911 Won by United States (4½-3, 4½-3½) at Meadow Brook. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards; No. 3, Capt. J. Hardress Lloyd; Back, Capt. Herbert H. Wilson.</p> |
| <p>1902 Won by Great Britain (1-2, 6-1, 7-1) at Hurlingham. Great Britain: No. 1, Cecil P. Nickalls; No. 2, P. W. Nickalls and F. M. Freake; No. 3, Walter Buckmaster and George A. Miller; Back, Charles D. Miller and Walter Buckmaster. United States: No. 1, R. L. Agassiz and J. M. Waterbury, Jr.; No. 2, J. E. Cowdin and Lawrence Waterbury; No. 3, Foxhall P. Keene; Back, Lawrence Waterbury and R. L. Agassiz.</p> | <p>1913 Won by United States (5½-3, 4½-4¼) at Meadow Brook. United States: No. 1, Lawrence Waterbury and Louis E. Stoddard; No. 2, J. M. Waterbury, Jr., and Lawrence Waterbury; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards and F. M. Freake; No. 3, Capt. R. G. Ritson; Back, Capt. Vivian N. Lockett.</p> |
| <p>1909 Won by United States (9-5, 8-2) at Hurlingham. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Herbert H. Wilson and Harry Rich; No. 2, F. M. Freake; No. 3, P. W. Nickalls; Back, Lord Wodehouse and Capt. J. Hardress Lloyd.</p> | <p>1914 Won by Great Britain (8½-3, 4-2¾) at Meadow Brook. Great Britain: No. 1, Capt. H. A. Tomkinson; No. 2, Capt. Leslie St. G. Cheape; No. 3, Maj. F. W. Barrett; Back, Capt. Vivian N. Lockett. United States: No. 1, Rene LaMontagne; No. 2, J. M. Waterbury, Jr.; No. 3, Devereux</p> |

Milburn and Lawrence Waterbury; Back, Lawrence Waterbury and Devereux Milburn.

1921 Won by United States (11-4, 10-6) at Hurlingham. United States: No. 1, Louis E. Stoddard; No. 2, Thomas Hitchcock, Jr.; No. 3, J. Watson Webb; Back, Devereux Milburn. Great Britain: No. 1, Lt. Col. H. A. Tomkinson; No. 2, Maj. F. W. Barrett; No. 3, Lord Wodehouse; Back, Maj. Vivian N. Lockett.

1924 Won by United States (16-5, 14-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson and Robert E. Strawbridge Jr.; Back, Devereux Milburn. Great Britain: No. 1, Maj. T. W. Kirkwood and Lt. Col. T. P. Melvill; No. 2, Maj. F. W. Hurndall and Maj. G. H. Phipps-Hornby; No. 3, Maj. E. G. Atkinson; Back, Lewis L. Lacey.

1927 Won by United States (13-3, 8-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson; Back, Devereux Milburn. Great Britain: No. 1, Capt. Claude E. Pratt and Capt. R. George; No. 2,

Argentina vs. United States

1928 Won by United States (7-6, 7-10, 13-7) at Meadow Brook. United States: No. 1, W. A. Harriman; No. 2, Thomas Hitchcock, Jr.; and E. A. S. Hopping; No. 3, Malcolm Stevenson and Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson; No. 3, J. B. Miles; Back, Lewis L. Lacey.

1932 Won by United States (9-6, 7-8, 12-10) at Buenos Aires. United States: No. 1, Michael G. Phipps; No. 2, Elmer J. Boeseke, Jr.; No. 3,

Maj. Austin H. Williams and Capt. J. P. Dening; No. 3, Capt. C. T. I. Roark; Back, Maj. E. G. Atkinson.

1930 Won by United States (10-5, 14-9) at Meadow Brook. United States: No. 1, Eric Pedley; No. 2, Earle A. S. Hopping; No. 3, Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Great Britain: No. 1, Gerald Balding; No. 2, Lewis L. Lacey; No. 3, Capt. C. T. I. Roark; Back, Humphrey P. Guinness.

1936 Won by United States (10-9, 8-6) at Hurlingham. United States: No. 1, Eric Pedley; No. 2, Michael G. Phipps; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Hesketh H. Hughes; No. 2, Gerald Balding; No. 3, Eric H. Tyrrell-Martin; Back, Humphrey P. Guinness.

1939 Won by United States (11-7, 9-4) at Meadow Brook. United States: No. 1, Michael G. Phipps; No. 2, Thomas Hitchcock, Jr.; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Robert Skene; No. 2, Aidan Roark; No. 3, Gerald Balding; Back, Eric H. Tyrrell-Martin.

Winston F. C. Guest; Back, William Post, 2d. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson and Martin Reynal; No. 3, José Reynal; Back, Manuel Andrada.

1936 Won by Argentina (21-9, 8-4) at Meadow Brook. Argentina: No. 1, Luis Duggan; No. 2, Roberto Cavanaugh; No. 3, Andres Gazzotti; Back, Manuel Andrada. United States: No. 1, G. H. Bostwick; No. 2, Gerald Balding; No. 3, Thomas Hitchcock, Jr.; Back, John Hay Whitney.

NATIONAL OPEN FINAL, 1950

At Westbury, N.Y., Sept 24

BOSTWICK FIELD (7)	CALIFORNIA (5)
1—G. H. Bostwick	1—Bob Fletcher
2—George Oliver	2—C. C. Combs
3—A. L. Corey Jr.	3—Bob Skene
Back—D. Milburn Jr.	Back—Carlton Beal

SCORE BY PERIODS

Bostwick Field.....	0	1	1	1	2	2-7
California.....	2	0	0	0	1	2-5

Goals—Bostwick Field: Bostwick 3, Oliver 4. California: Fletcher, Skene 4.
Umpires—W. H. Gaylord and Terence Preece.
Referee—Robert E. Strawbridge Jr. Time of periods—7½ minutes.

Indoor Champions, 1950

National senior—Brooklyn P. C.
National intercollegiate—Miami (Fla.)
Sherman Memorial (Eastern)—Squadron A Troopers, New York
Eastern 12-goal—Pittsfield (Mass.) P. C.

WATERBURY CUP FINAL, 1950

At Westbury, N.Y., Oct. 1

CALIFORNIA (9)	BOSTWICK FIELD (5)
1—Bob Fletcher	1—G. H. Bostwick
2—C. C. Combs	2—Jules Romfh
3—Bob Skene	3—George Oliver
Back—Carlton Beal	Back—D. Milburn Jr.

SCORE BY PERIODS

California.....	2	2	0	2	1-9
Bostwick Field.....	2	0	0	2	0-5

Goals—California: Fletcher, Combs 2, Skene 3, by handicap 2. Bostwick Field: Bostwick, Romfh 3, Oliver. Substitute—Bostwick Field: Enrique Alberdi for Oliver.
Umpires—W. H. Gaylord and Terence Preece.
Referee—R. E. Strawbridge Jr. Time of periods—7½ minutes.

George Oliver's Milwaukee team beat Bostwick Field, 9-7, in the final of the national 20-goal polo championship last year. The other members of the winning quartet were Pedro Silvero, Juan Rodriguez and Robert Uthlein.

NATIONAL OPEN POLO CHAMPIONS, 1904-1950

Not held from 1905 to 1909, inclusive; 1911, 1915, 1917, 1918, and from 1942 to 1945, inclusive.

1904—WANDERERS

- 1—C. R. Snowden
- 2—J. E. Cowdin
- 3—J. M. Waterbury, Jr.
- Back—L. Waterbury

1910—RANELAGH

- 1—R. N. Grenfell
- 2—F. Grenfell
- 3—Earl of Rocksavage
- Back—F. A. Gill

1912—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

1913—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

1914—MEADOW BROOK
MAGPIES

- 1—N. L. Tilney
- 2—J. W. Webb
- 3—W. G. Loew
- Back—H. Phipps

1916—MEADOW BROOK

- 1—H. Phipps
- 2—C. C. Rumsey
- 3—W. G. Loew
- Back—D. Milburn

1919—MEADOW BROOK

- 1—F. H. Prince, Jr.
- 2—J. W. Webb
- 3—F. S. von Stade
- Back—D. Milburn

1920—MEADOW BROOK

- 1—F. S. von Stade
- 2—J. W. Webb
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

1921—GREAT NECK

- 1—L. E. Stoddard
- 2—R. Wanamaker, II
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

1922—ARGENTINE

- 1—J. B. Miles
- 2—J. D. Nelson
- 3—D. B. Miles
- Back—L. L. Lacey

1923—MEADOW BROOK

- 1—R. Belmont
- 2—T. Hitchcock, Jr.
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

1924—MIDWICK

- 1—E. G. Miller
- 2—E. L. Pedley
- 3—A. P. Perkins
- Back—C. F. Burke

1925—ORANGE COUNTY

- 1—W. A. Harriman
- 2—J. W. Webb
- 3—M. Stevenson
- Back—J. C. Cowdin

1926—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

1927—SANDS POINT

- 1—W. A. Harriman
- 2—T. Hitchcock, Jr.
- 3—J. C. Cowdin
- Back—L. E. Stoddard

1928—MEADOW BROOK

- 1—C. V. Whitney
- 2—W. F. C. Guest
- 3—J. B. Miles
- Back—M. Stevenson

1929—HURRICANES

- 1—S. Sanford
- 2—Capt. C. T. I. Roark
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

1930—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

1931—SANTA PAULA

- 1—A. Gazzotti
- 2—José Reynal
- 3—Juan Reynal
- Back—M. Andrada

1932—TEMPLETON

- 1—M. G. Phipps
- 2—W. F. C. Guest
- 3—S. B. Iglehart
- Back—R. R. Guest

1933—AURORA

- 1—S. H. Knox
- 2—J. P. Mills
- 3—E. T. Gerry
- Back—E. J. Boeseke, Jr.

1934—TEMPLETON

- 1—M. G. Phipps
- 2—W. F. C. Guest
- 3—S. B. Iglehart
- Back—R. R. Guest

1935—GREENTREE

- 1—G. H. Bostwick
- 2—T. Hitchcock, Jr.
- 3—G. Balding
- Back—J. H. Whitney

1936—GREENTREE

- 1—G. H. Bostwick
- 2—G. Balding
- 3—T. Hitchcock, Jr.
- Back—J. H. Whitney

1937—OLD WESTBURY

- 1—M. G. Phipps
- 2—C. Smith
- 3—S. B. Iglehart
- Back—C. V. Whitney

1938—OLD WESTBURY

- 1—M. G. Phipps
- 2—C. Smith
- 3—S. B. Iglehart
- Back—C. V. Whitney

1939—BOSTWICK FIELD

- 1—G. H. Bostwick
- 2—R. L. Gerry, Jr.
- 3—E. T. Gerry
- Back—E. H. Tyrrell-Martin

1940—AKNUSTI

- 1—G. S. Smith
- 2—R. L. Gerry, Jr.
- 3—E. T. Gerry
- Back—A. L. Corey, Jr.

1941—GULF STREAM

- 1—J. H. A. Phipps
- 2—M. G. Phipps
- 3—C. S. von Stade
- Back—A. L. Corey, Jr.

1946—HERRADURA

- 1—Gabriel Gracida
- 2—Guillermo Gracida
- 3—Alejandro Gracida
- Back—José Gracida

1947—OLD WESTBURY

- 1—P. Silvero
- 2—C. C. Combs
- 3—S. B. Iglehart
- Back—G. Oliver

1948—HURRICANES

- 1—L. Sheerin
- 2—P. Perkins
- 3—C. Smith
- Back—S. Sanford

1949—HURRICANES

- 1—L. Sheerin
- 2—R. Cavanaugh
- 3—C. Smith
- Back—S. Sanford

1950—BOSTWICK FIELD

- 1—G. H. Bostwick
- 2—George Oliver
- 3—A. L. Corey, Jr.
- Back—D. Milburn, Jr.

HUNTS MEETING WINNERS, 1950

- Carolina Cup—Alfred M. Hunt's Flare Flight
- Foxcatcher National Cup—Mrs. Esther du Pont Weil's Canford
- International Gold Cup—W. C. Robinson, Jr.'s Crown Royal
- Maryland Grand National—Alvin Untermyer's Done Sleeping
- Maryland Hunt Cup—Mrs. William J. Clothier's Pine Pep
- New Jersey Hunt Cup—Jester's Moon
- Pennsylvania Hunt Cup—Mrs. John Strawbridge, Jr.'s Jester's Moon
- Virginia Gold Cup—Done Sleeping

Chile Takes Tuna Trophy

Chile, a newcomer to the competition, captured the Alton B. Sharp Trophy, emblematic of world team tuna supremacy, at the seventh annual international tournament off Wedgeport, Nova Scotia, last September. The final standing:

	Points		Points
Chile.....	1,962	Argentina.....	393
British Empire.....	1,614	Scandinavia.....	195
Brazil.....	640	United States.....	0
Cuba.....	563		

ARCHERY

ARCHERY goes back through song and story and classic legend to the primeval days when bows and arrows were means of obtaining food and also weapons in warfare, but the invention of gunpowder in the 14th Century brought about a complete change in the hunting field and in the ranks of war. Archery survived only as a sport. One of the oldest annual sporting events in England is the archery contest for "The Ancient Scorton Arrow" (a little silver dart) that has been held each year in Yorkshire since 1673. The tradition

of archery survived in many European countries and many tournaments were held each year until World War II obliterated them. The American Indians, of course, used the bow and arrow until guns came into their hands through early explorers and settlers. Organized archery as a sport in the United States began with the formation of a club called the United Bowmen of Philadelphia in 1828. The sport languished through the Civil War period but was revived by the formation of the National Archery Association in 1878.

NATIONAL CHAMPIONS, 1950

Source: Lawrence E. Briggs, Secretary, National Archery Association of the United States.

Target	Score
Men—Stan Overby, Ingleside, Calif.....	463-3249
Women—Jean Lee, Springfield, Mass.....	468-3812
Jr. boys—Michael Moga, Niagara Falls, N. Y.....	458-3060
Jr. girls—Betty Wagner, Fond du Lac, Wis.....	467-3311
Intermediate boys—Harry Edwards, Parsippany, N. J.....	360-2786
Intermediate girls—Janet Lehmer, Harrisburg, Pa.....	316-2150
Beginner boys—Bob Taylor, Parsippany, N. J.....	287-1927
Beginner girls—Catherine Richards, Laguna Beach, Calif.....	238-1150

Club Team	Score
Men—Santa Monica (Calif.) A. C.....	380-2708
Women—Baltimore Orioles.....	380-2468

Flight-Regular Style	Score
Men—Irving Baker, Westfield, N. J.....	602 yd.
Women—Evelyn Haines, Warren, Pa.....	505 yd.
Jr. boys—Harold Duppre, Brentwood, Pa.....	344 yd. 1 ft. 6 in.
Jr. girls—Barbara Van Popering, Greenwich, Conn.....	338 yd.

Flight—Free Style	Score
Men—Charles Pierson, Cincinnati... 617 yd. 2 ft.	
Women—Eunice Modlin, Evansville, Ind....	564 yd.

Clout	Score
Men (180 yd.)—Lloyd Corby, Denville, N. J.....	36-244
Women (140 yd.)—Ann Weber, Bloomfield, N. J.....	36-294
Women (120 yd.)—Ann Weber.....	36-269
Jr. boys—Don Mitchell, Scott Air Base, Ill.....	36-248
Jr. girls—Laurette Young, Detroit.....	36-266
Intermediate boys—Harry Edwards.....	36-258
Intermediate girls—Janet Lehmer.....	36-210
Beginner boys—Spike Carling, Eatontown, N. J.....	25-93

Crossbow—Harold Morse, Plainfield, N. J.	353-2161
--	----------

World Champions, 1950	Points
Men—Hans Deutgen, Sweden.....	3,141
Women—Jean Lee, United States.....	3,254
Men's team—Denmark.....	8,336
Women's team—Finland.....	7,606

NATIONAL RECORDS

Event	Recordholder	Score	Year
Double York	Stan Overby.....	283-1755	1950
Single York	Stan Overby.....	139-593	1950
Double American	Stan Overby.....	180-1494	1950
Single American	Russ Reynolds.....	90-752	1948
International	Russ Reynolds.....	143-911	1950
00-yd. York	Larry Hughes.....	72-434	1948
0-yd. York	Russ Reynolds.....	48-356	1949
0-yd. York	Ralph Miller.....	24-196	1935
0-yd. York	Pat Chambers.....	24-196	1938
0-yd. American	Stan Overby.....	30-246	1950
0-yd. American	Stan Overby.....	30-258	1950
0-yd. American	Russ Reynolds.....	30-264	1949

Event	Recordholder	Score	Year
Double National	Jean Lee.....	144-1138	1950
Single National	Jean Lee.....	72-574	1950
Double Columbia	Jean Lee.....	143-1198	1950
Single Columbia	Ann Weber.....	72-612	1950
Double American	Jean Lee.....	180-1476	1950
Single American	Jean Lee.....	90-740	1950
Forefere Round	Jean Richards.....	143-921	1949
0-yd. National	Jean Lee.....	24-202	1950
0-yd. Columbia	Ann Weber.....	24-198	1950
0-yd. American	Jean Lee.....	24-198	1950
0-yd. Columbia	Ann Weber.....	24-206	1950
0-yd. American	Charlotte Cashner.....	24-206	1950
0-yd. Columbia	Jean Lee.....	24-214	1949-50
0-yd. American	Jean Lee.....	30-238	1950
0-yd. American	Jean Lee.....	30-248	1950
0-yd. American	Jean Lee.....	30-260	1950

Flight	Distance	Points
REGULAR STYLE	yd. ft. in.	
Men—Jack Stewart.....	640 0 0	1949
Women—Evelyn Haines.....	505 0 0	1950
Jr. boys—Edward Berg, Jr.....	447 0 0	1949
Jr. girls—Peggy Dunaway.....	427 2 9½	1946

FREE STYLE	Score
Men—Paul Berry.....	719 2 0
Women—Mrs. Cecil Modlin.....	575 2 0

Clout	Score
Men (180 yd.)—Larry Hughes.....	36-286
Women (140 yd.)—Helen Little.....	36-276
Ann M. Weber.....	36-276
Women (120 yd.)—Ann M. Weber.....	36-294

Team	Score
Men's club—Santa Monica.....	380-2708
Women's club—Essex Archers.....	383-2615
Men's individual rd.—Russ Reynolds.....	96-766
Women (60 yd.)—Jean Lee.....	96-742
Women (50 yd.)—Mildred Morrison.....	96-740

SWIMMING

THERE IS THE ancient tale of Leander of Abydos swimming the Hellespont nightly to call on Helen of Sestos but nobody kept the time on his trips. However, Lord Byron swam one leg of the old Leander course, Sestos to Abydos, on May 3, 1810, in 1 hour 10 minutes. The famous British poet was a noted swimmer and once, in an endurance trial at Venice, was in the water for 4 hours 10 minutes. Distance swimming was the early type of competition. Captain Matthew Webb achieved fame by being the first to swim the English Channel—Dover to Calais—in August, 1875, in 21 hours 45 minutes. Many other swimmers, men and women, have conquered the

Channel since that time. Gertrude Ederle, of New York City, was the first woman to accomplish the feat. Miss Ederle swam the Channel Aug. 6, 1926, in 14 hours 34 minutes, breaking the existing record at that time. Since then the record has been lowered by four or five men.

Regular competition at short as well as long distances and indoor as well as outdoor came with the development of such organizations as the Amateur Athletic Union and the building of indoor and outdoor swimming pools. Swimming has been on the Olympic program since the start of the modern Olympic Games at Athens in 1896.

WORLD RECORDS

Source: Official Amateur Athletic Union Swimming Rules and Records Book. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y., and R. M. Ritter, Secretary-Treasurer, International Amateur Swimming Federation.

Accepted by the International Amateur Swimming Federation as of October 1, 1950.

MEN

FREE STYLE

Distance	Time	Course	Holder	Home country	Where made	Date
100 yd.	49.7 s.	25 yd.	Alan Ford	U. S.	New Haven, Conn.	Mar. 18, 1944
100 m.	55.4 s.	25 m.	Alan Ford	U. S.	New Haven	June 29, 1948
200 m.	2 m. 4.6 s.	25 yd.	J. B. Marshall	Australia	New Haven	Mar. 31, 1950
220 yd.	2 m. 5.5 s.	25 yd.	J. B. Marshall	Australia	New Haven	Mar. 31, 1950
400 m.	4 m. 29.5 s.	25 yd.	J. B. Marshall	Australia	New Haven	Apr. 1, 1950
440 yd.	4 m. 31.2 s.	25 yd.	J. B. Marshall	Australia	New Haven	Apr. 1, 1950
500 yd.	5 m. 12 s.	25 yd.	J. B. Marshall	Australia	New Haven	June 30, 1950
500 m.	5 m. 54.3 s.	25 yd.	J. B. Marshall	Australia	Detroit	June 10, 1950
800 m.	9 m. 35.5 s.	50 m.	H. Furuhashi	Japan	Los Angeles	Aug. 19, 1949
880 yd.	9 m. 37.5 s.	55 yd.	J. B. Marshall	Australia	Seattle	July 23, 1950
1,500 m.	18 m. 19 s.	50 m.	H. Furuhashi	Japan	Los Angeles	Aug. 16, 1949
1 mi.	19 m. 49.4 s.	55 yd.	J. B. Marshall	Australia	New Haven	July 7, 1950

Relays

400-yd.	3 m. 23.8 s.	25 yd.	New Haven S. C.	U. S.	New Haven, Conn.	July 2, 1948
			(A. Ford, E. Hueber, F. Dooley, H. Johnson)			
400-m.	3 m. 48.6 s.	25 m.	New Haven S. C.	U. S.	New Haven, Conn.	June 29, 1948
			(A. Ford, E. Hueber, F. Dooley, H. Johnson)			
800-yd.	7 m. 48.9 s.	25 yd.	Yale University	U. S.	New Haven	Feb. 11, 1950
			(W. Farnsworth, L. Munson, J. Blum, R. Reid)			
800-m.	8 m. 40.6 s.	25 m.	Tokyo Swim Club	Japan	Marilla	Apr. 2, 1950
			(Y. Hamaguchi, S. Murayama, S. Hashizume, H. Furuhashi)			

BREAST STROKE

100 yd.	58.5 s.	25 yd.	Keith E. Carter	U. S.	Lafayette, Ind.	May 5, 1949
100 m.	1 m. 6.8 s.	25 m.	L. K. Meshkov	U.S.S.R.	Moscow	Apr. 17, 1950
200 yd.	2 m. 13.1 s.	25 yd.	R. L. Brawner	U. S.	Princeton, N. J.	Mar. 11, 1950
200 m.	2 m. 28.3 s.	25 yd.	Joe Verdeur	U. S.	New Haven	Mar. 31, 1950

BACKSTROKE

100 yd.	56.8 s.	25 yd.	A. Kiefer	U. S.	Annapolis, Md.	Feb. 26, 1944
100 m.	1 m. 03.6 s.	25 m.	Allen M. Stack	U. S.	New Haven, Conn.	Feb. 4, 1949
150 yd.	1 m. 29.9 s.	25 yd.	Allen M. Stack	U. S.	New Haven, Conn.	May 5, 1949
200 m.	2 m. 18.5 s.	25 yd.	Allen M. Stack	U. S.	New Haven, Conn.	May 4, 1949

MEDLEY RELAY

(Back, breast, free style)

300 yd.	2 m. 49.1 s.	25 yd.	Univ. of Michigan	U. S.	Ann Arbor, Mich.	Feb. 21, 1948
			(H. Holiday, R. Suhl, R. Weinberg)			
300 m.	3 m. 12.3 s.	50 m.	Dauphins de Toulouse	France	Marseille	Sept. 16, 1948
			(G. Vallery, A. Nakache, A. Jany)			

WOMEN

FREE STYLE

Distance	Time	Course	Holder	Home country	Where made	Date
100 yd.	58.2 s.	25 m.*	Greta Andersen	Denmark	Svendborg	Feb. 24, 1949
100 m.	1 m. 4.6 s.	25 m.	W. Den Ouden	Netherlands	Amsterdam	Feb. 27, 1936
200 m.	2 m. 21.7 s.	25 m.	R. Hveger	Denmark	Aarhus	Sept. 11, 1938
220 yd.	2 m. 22.6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Apr. 23, 1939
300 yd.	3 m. 25.6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Oct. 2, 1938
300 m.	3 m. 42.5 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
400 m.	5 m. 0.1 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
440 yd.	5 m. 7.9 s.	25 yd.	Ann Curtis	U. S.	Seattle, Wash.	May 2, 1947
500 yd.	5 m. 53 s.	25 m.	R. Hveger	Denmark	Copenhagen	Apr. 19, 1942
500 m.	6 m. 27.4 s.	25 m.	R. Hveger	Denmark	Copenhagen	Feb. 11, 1940
800 m.	10 m. 52.5 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 13, 1941
880 yd.	11 m. 8.6 s.	50 yd.*	Ann Curtis	U. S.	San Francisco	July 30, 1944
1,000 yd.	12 m. 36 s.	50 m.*	R. Hveger	Denmark	Helsingør, Den.	Sept. 4, 1938
1,000 m.	13 m. 54.4 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
1,500 m.	20 m. 57 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
1 mi.	23 m. 11.5 s.	50 m.*	R. Hveger	Denmark	Helsingør	July 3, 1938

Relays

400-yd.	4 m. 5.7 s.	25 yd.*	National Team	Denmark	Copenhagen	Apr. 11, 1943
			(F. Nathansen, K. O. Petersen, B. O. Petersen, K. M. Harup)			
400-m.	4 m. 27.6 s.	25 m.	National Team	Denmark	Copenhagen	Aug. 7, 1938
			(E. Arndt, G. Kraft, B. O. Petersen, R. Hveger)			

* Salt water.

BREAST STROKE

100 yd.	1 m. 9.2 s.	25 yd.	N. van Vliet	Netherlands	Hilversum	May 4, 1947
100 m.	1 m. 17.4 s.	25 m.*	G. Vallerey	France	Casablanca	Apr. 23, 1950
200 yd.	2 m. 35.6 s.	25 m.	N. van Vliet	Netherlands	The Hague	Aug. 24, 1946
200 m.	2 m. 49.2 s.	25 m.	N. van Vliet	Netherlands	Hilversum	July 20, 1947

* Salt water.

BACKSTROKE

100 yd.	1 m. 4.6 s.	25 m.	G. Wielema	Netherlands	Hilversum	Mar. 13, 1950
100 m.	1 m. 10.9 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Sept. 22, 1939
150 yd.	1 m. 42.1 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Sept. 29, 1939
200 m.	2 m. 35.3 s.	25 m.	G. Wielema	Netherlands	Hilversum	Apr. 2, 1950

MEDLEY RELAY

(Back, breast, free style)

300 yd.	3 m. 19.6 s.		National Team	Netherlands	Hilversum	May 4, 1947
			(I. K. van Feggelin, N. van Vliet, H. Jermculen)			
300 m.	3 m. 42.4 s.		National Team	Netherlands	Arnhem, Neth.	April 28, 1947
			(I. K. van Feggelin, N. van Vliet, H. Jermculen)			

EUROPEAN CHAMPIONS, 1950

100-m. free—Alex Jany, France	0:57.7
400-m. free—Alex Jany	4:48
1,500 m. free—H. Lehmann, Germany	19:48.2
100-m. back—G. Larsson, Sweden	1:09.4
200-m. breast—H. Klein, Germany	2:38.6
800-m. free-style relay—Sweden (Synnerholm, Ostrand, Larsson, Johansson)	9:06.5
High dive—G. Haase, Germany	158.13 pts.
Springboard dive—H. Aderhold, Germany	183.08 pts.
Team—France	87 pts.

Furuhashi Sets 3 Records

Hironoshin Furuhashi, Japanese swimming star, broke three of his own world records during a three-day United States-Japan meet at Tokyo last August, which was won by the U. S., 46-17. Furuhashi captured the 800-meter free-style event in 9:42.8, nearly three seconds better than the previous record. He won the 400-meter free-style in 4:33.2, to lower the former mark by 1.4 seconds, and the 200-meter free-style in 2:08.2, two-tenths of a second under the old standard. In the same meet the United States 400-meter relay team covered the distance in 8:42.8, bettering the universal record by 3.2 seconds.

A.A.U. LONG-DISTANCE CHAMPIONS

MEN

Individual (4 miles)—Luis Childs, Univ. of Michigan	1:29:33
Team—Providence (R. I.) Central Boys Club	15 pts.

WOMEN

Individual (3 miles)—Kathleen Clark, Lafayette (Ind.) C.C.	1:19:08.2
Team—Kenosha (Wis.) Youth Foundation	9 pts.

Lumsden Takes 15-Mile Race

Cliff Lumsden of Toronto captured the Canadian National Exhibition 15-mile swim for the second straight year in 1950. Lumsden, who received \$5,000 as his share of the purse, covered the Toronto grind in 7 hours 18 minutes 5 seconds. Runner-up honors went to Tom Park, Jr., of Hamilton, Ontario, with Ben Gazel of Toronto third.

A tandem from Italy, Severino Rigoni and Fernando Terruzzi, won the six-day bicycle race in New York last March with 1,610 points.

NATIONAL A. A. U. SWIMMING CHAMPIONS, 1950

Men's Outdoor

110-yd. free—Richard Cleveland, U. of Hawaii.....	0:58.2
220-yd. free—Jim McLane, New Haven S. C.....	2:10.5
440-yd. free—John Marshall, New Haven S. C.....	4:39.3
880-yd. free—John Marshall.....	9:37.5
1-mile free—John Marshall.....	20:08.6
110-yd. back—Allen Stack, New Haven S. C.....	1:08.2
220-yd. breast—Robert Brawner, Princeton A.C.....	2:41
330-yd. medley—James P. Thomas, U. of No. Carolina.....	3:55.1
330-yd. medley relay—Coca Cola S. C. "A," Cincinnati (Dick Fetterman, Robert Sohl, Dick Thoman).....	3:19.4
880-yd. relay—New Haven S. C. (McLane, Don Scheff, Wayne Moore, Marshall).....	9:07
3-m. dive—Joe Marino, Ohio State.....	142.35 pts.
Platform dive—John McCormack, Pasadena A. C.....	116.30 pts.
Team—New Haven (Conn.) S. C.....	65 pts.

Women's Outdoor

100-m. free—Jackie Lavine, Town Club, Chicago....	1:10
100-m. back—Maureen O'Brien, Town Club.....	1:17.9
100-m. breast—Judy Cornell, Multnomah A. C., Portland, Oreg.....	1:23.1
200-m. back—Maureen O'Brien.....	2:51.2
200-m. breast—Evelyn Kawamoto, Hawaii S. C., Honolulu, and Marge Hulton, Brighton S. C., Atlantic City, N. J. (tie).....	3:10.2
400-m. free—Thelma Kalama, Hawaii S. C.....	5:30.9
800-m. free—Carolyn Green, Ft. Lauderdale (Fla.) S. A.....	11:28.3
1,500-m. free—Barbara Hobelmann, Ambassador S. C., Washington, D. C.....	22:26.7
300-m. medley—Evelyn Kawamoto.....	4:29
300-m. medley relay—Lafayette (Ind.) Country Club (Sheila Donahue, Carol Pence, Betty Mullen).....	3:54.8
800-m. relay—Hawaii S. C. "A" (Julia Murakami, Catherine Kleinschmidt, Miss Kawamoto, Miss Kalama).....	10:37.4
1-m. dive—Pat McCormick, Los Angeles A. C.....	144.89 pts.
3-m. dive—Pat McCormick.....	162.85 pts.
Platform dive—Pat McCormick.....	66.74 pts.
Team—Hawaii S. C., Honolulu.....	41 pts.

Men's Indoor

100-yd. free—Clark Scholes, Mich. State.....	0:51.3
220-yd. free—John Marshall, Yale Freshmen.....	2:05.5
440-yd. free—John Marshall.....	4:31.2
1,500-m. free—John Marshall.....	18:37
150-yd. back—Allen Stack.....	1:32.9
220-yd. breast—Robert Brawner, Princeton U.....	2:29.3
300-yd. medley—Joe Verdeur, Brighton S. C., Atlantic City, N. J.....	3:25.1
400-yd. relay—New Haven S. C. (Bill Farnsworth, Larom Munson, John Blum, Ray Reid).....	3:26.4
300-yd. medley relay—New Haven S. C. (Stack, Robert Essert, Reid).....	2:51.6
1-meter dive—Bruce Harlan, Ohio State.....	138.10 pts.
3-meter dive—Bruce Harlan.....	156.08 pts.
Team—Yale Freshmen.....	43 pts.

Women's Indoor

100-yd. free—Marie Corridon, Women's S. A., New York.....	1:00.1
100-yd. back—Maureen O'Brien.....	1:07.4
100-yd. breast—Judy Cornell.....	1:12.6
200-yd. back—Maureen O'Brien.....	2:29.5
220-yd. free—Jackie Lavine.....	2:32.3
220-yd. breast—Carol Pence, Lafayette (Ind.) C. C.....	3:04.1
300-yd. medley—Barbara Jensen, Crystal Plunge, San Francisco.....	4:00.4
440-yd. free—Jackie Lavine.....	5:28.9
300-yd. medley relay—Lafayette Country Club (Lorna Dooling, Carol Pence, Betty Mullen).....	3:25.9
440-yd. relay—Town Club (Maureen O'Brien, Jody Alderson, Barbara Scott, Jackie Lavine).....	4:07.7
1-meter dive—Sara Wakefield, Univ. of No. Carolina.....	133.90 pts.
3-meter dive—Mary F. Cunningham, Lafayette C. C.....	143.70 pts.
Team—Town Club, Chicago.....	41 pts.

Eric Sturges of South Africa and Louise Brough of the United States won the Wimbledon mixed doubles lawn tennis championship in 1950.

SOFTBALL

Source: Amateur Softball Association

World Amateur Champions

MEN

1933—J. L. Gillis, Chicago, Ill.
1934—Ke-Nash-A's, Kenosha, Wis.
1935—Crimson Coaches, Toledo, Ohio
1936—Kodak Park, Rochester, N. Y.
1937—Briggs Mfg. Co., Detroit, Mich.
1938—Pohlers, Cincinnati, Ohio
1939—Carr's, Covington, Ky.
1940—Kodak Park, Rochester, N. Y.
1941—Bendix Brakes, South Bend, Ind.
1942—Deep Rock Oilers, Tulsa, Okla.
1943—Hammer Field, Fresno, Calif.
1944—Hammer Field, Fresno, Calif.
1945—Zollners, Fort Wayne, Ind.
1946—Zollners, Fort Wayne, Ind.
1947—Zollners, Fort Wayne, Ind.
1948—Briggs Beautyware, Detroit, Mich.
1949—Tip Top Tailors, Toronto, Ontario
1950—Clearwater (Fla.) Bombers

WOMEN

1933—Great Northerns, Chicago, Ill.
1934—Hart Motors, Chicago, Ill.
1935—Bloomer Girls, Cleveland, Ohio
1936—National Mfg. Co., Cleveland, Ohio
1937—National Mfg. Co., Cleveland, Ohio
1938—J. J. Kreig's, Alameda, Calif.
1939—J. J. Kreig's, Alameda, Calif.
1940—Arizona Ramblers, Phoenix
1941—Higgins Midgets, Tulsa, Okla.
1942—Jax Maids, New Orleans, La.
1943—Jax Maids, New Orleans, La.
1944—Lind & Pomeroy, Portland, Ore.
1945—Jax Maids, New Orleans, La.
1946—Jax Maids, New Orleans, La.
1947—Jax Maids, New Orleans, La.
1948—Arizona Ramblers, Phoenix
1949—Arizona Ramblers, Phoenix
1950—Orange (Calif.) Lionettes

BADMINTON

Source: John E. Garrod, American Badminton Association.

United States Champions

Men's Singles

Year	Champion
1937	Walter R. Kramer, Detroit, Mich.
1938	Walter R. Kramer, Detroit, Mich.
1939	David G. Freeman, Pasadena, Calif.
1940	David G. Freeman, Pasadena, Calif.
1941	David G. Freeman, Pasadena, Calif.
1942	David G. Freeman, Pasadena, Calif.
1943	David G. Freeman, Pasadena, Calif.
1944	David G. Freeman, Pasadena, Calif.
1945	David G. Freeman, Pasadena, Calif.
1946	David G. Freeman, Pasadena, Calif.
1947	David G. Freeman, Pasadena, Calif.
1948	David G. Freeman, Pasadena, Calif.
1949	Martin Mendez, San Diego, Calif.
1950	Martin Mendez, San Diego, Calif.

Men's Doubles

1937	Chester Goss—Donald Eversoll, Los Angeles, Calif.
1938	Hamilton Law—Richard Yeager, Seattle, Wash.
1939	Hamilton Law—Richard Yeager, Seattle, Wash.
1940	Chester Goss—David G. Freeman, Pasadena, Calif.
1941	Chester Goss—David G. Freeman, Pasadena, Calif.
1942	Chester Goss—David G. Freeman, Pasadena, Calif.
1943	Chester Goss—David G. Freeman, Pasadena, Calif.
1944	D. G. Freeman—Webster Kimball, Pasadena, Calif.
1945	D. G. Freeman—Wynn Rogers, Arcadia, Calif.
1946	D. G. Freeman—Wynn Rogers, Arcadia, Calif.
1947	D. G. Freeman—Wynn Rogers, Arcadia, Calif.
1948	D. G. Freeman—Wynn Rogers, Arcadia, Calif.
1949	Barney McCay, Pasadena—Wynn Rogers, Arcadia, Calif.
1950	Barney McCay, Pasadena—Wynn Rogers, Arcadia, Calif.

Women's Singles

1937	Mrs. Del Barkhuff, Seattle, Wash.
1938	Mrs. Del Barkhuff, Seattle, Wash.
1939	Mrs. Del Barkhuff, Seattle, Wash.
1940	Mrs. Del Barkhuff, Seattle, Wash.
1941	Mrs. Del Barkhuff, Seattle, Wash.
1942	Mrs. Del Barkhuff, Seattle, Wash.
1943	Mrs. Del Barkhuff, Seattle, Wash.
1944	Mrs. Del Barkhuff, Seattle, Wash.
1945	Mrs. Del Barkhuff, Seattle, Wash.
1946	Mrs. Del Barkhuff, Seattle, Wash.
1947	Mrs. Del Barkhuff, Seattle, Wash.
1948	Mrs. Del Barkhuff, Seattle, Wash.
1949	Mrs. Del Barkhuff, Seattle, Wash.
1950	Mrs. Del Barkhuff, Seattle, Wash.

Women's Doubles

1937	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1938	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1939	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1940	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1941	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1942	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1943	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1944	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1945	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1946	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1947	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1948	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1949	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
1950	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.

Mixed Doubles

1937	Mrs. Del Barkhuff—Hamilton Law, Seattle.
1938	Mrs. Del Barkhuff—Hamilton Law.
1939	Zoe G. Smith—Richard Yeager, Seattle.
1940	Sally L. Williams, Spokane, Wash.—David G. Freeman, Pasadena.
1941	Sally L. Williams—David G. Freeman.
1942	Sally L. Williams—David G. Freeman.
1943	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1944	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1945	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1946	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1947	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1948	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1949	Wynn Rogers—Mrs. Virginia Hill, Pasadena.
1950	Wynn Rogers—Mrs. Virginia Hill, Pasadena.

OTHER CHAMPIONS, 1950

All-England

Singles	Wong Peng Soon, Malaya
Women's singles	Fru. Tonny Ahm, Denmark
Doubles	Jorn Skaarup-Preben Dabelsteen, Denmark
Women's doubles	Kirsten Thorndahl-Tonny Ahm, Denmark
Mixed doubles	Poul Holm-Tonny Ahm, Denmark

United States

Veterans' doubles	Robert Wright-Wayne Schell, Boston
Boys' singles	Steve Hinchliffe, Hermosa Beach, Calif.
Girls' singles	Judy Devlin, Baltimore
Boys' doubles	Manuel Armendariz, Burbank, Calif.—Steve Hinchliffe
Girls' doubles	Dudy McCormick, Westport, Conn.—Judy Devlin
Junior mixed doubles	Ronnie Ryan, Berkeley, Judy Devlin

CANOEING, 1950

Source: American Canoe Association.

Key to abbreviations: K-1—one-man double blade Kayak; K-2—two-man double blade Kayak; K-4—four-man double blade Kayak; C-1—one-man single blade (Canadian type canoe); C-2—two-man single blade (Canadian type canoe). The following abbreviations apply to the American type canoe: 1-1—one-man single blade; 2-1—two-man single blade; 4-1—four-man single blade; 1-2—one-man double blade; 2-2—two-man double blade; 4-2—four-man double blade.

World Paddling Championships (At Copenhagen, Denmark)

	Time
500-m. K-1—Fr. Kobberup, Denmark	2:06.8
1,000-m. K-1—Gert Fredriksson, Sweden	4:18.1
10,000-m. K-1—Stromberg, Finland	47:10.5
K-1 4-man relay (500 m. each way)—Sweden (Glaser, Hedberg, Klingstrom, Fredriksson)	8:15.4
500-m. K-1 (women)—Sylvia Salmo, Finland	2:25
500-m. K-2—L. Glaser-L. Hedberg, Sweden	1:49.3
1,000-m. K-2—Sweden	3:56.7
10,000-m. K-2—G. Ackerlund-H. Wetterstrom, Sweden	44:21.6
500-m. K-2 (women)—Sylvia Salmo-Greta Gronholm, Finland	2:10
1,000-m. K-4—Sweden (Phil. Eriksson, Pettersson, Haeppling)	8:15.4
10,000-m. K-4—Sweden (Anderson, Johansson, Gustavsson, Andersson)	38:50
1,000-m. C-1—Josef Holecek, Czechoslovakia	5:19.7
10,000-m. C-1—Boutigny, France	1:00:33.1
1,000-m. C-2—Jan Brzak-Bohumil Kudrna, Czechoslovakia	4:56.7
10,000-m. C-2—Czechoslovakia	56:24.4

National Paddling Championships

(At Lake Sebago, Sloatsburg, N. Y.)

SENIOR

K-1—M. Budrock, Yonkers (N. Y.) C. C.
K-2—P. Bochnewich-J. J. Anderson, Yonkers C. C.
2-1—F. Boutiller-D. Bingham, Samoset C. C., Dedham, Mass.
1-1—F. Havens, Washington (D. C.) C. C.
4-1—Samoset C. C. (F. Boutiller, D. Bingham, G. Byers, R. Mozer)
4-2—Yonkers C. C. (M. Budrock, J. Anderson, P. Bochnewich, R. Dunford)

JUNIOR

K-1—P. Bochnewich, Yonkers C. C.
1-1—M. Budrock, Yonkers C. C.
1-2—P. Bochnewich, Yonkers C. C.
2-1—G. Hornbostel-R. Sanders, Sebago C. C., Sloatsburg, N. Y.
4-1—Quineboguinn C. C., Boston (P. Doherty, R. Spillane, R. Moran, R. Salander)
4-2—Pendleton C. C., Yonkers, N. Y. (W. O'Donnell, B. Malara, J. Russell, E. Russell)
2-2—S. Messur-D. Kelley, Yonkers C. C.
Team (total for all events)—Yonkers C. C. (45 pts.)

SAILING

Decked—Adolph Morse, Phoenix C. C., Lindenhurst, N. Y.
Open—Douglas Cummin, Deer Lake C. C., Pine Lake, N. J.

FENCING

Source: Amateur Fencers League of America.

NATIONAL CHAMPIONS

Year	Foil	Épée	Saber	Women's foil
1892	W. S. O'Connor	B. F. O'Connor	R. O. Haubold	
1893	W. T. Heintz	G. M. Hammond	G. M. Hammond	
1894	C. G. Bothner	R. O. Haubold	G. M. Hammond	
1895	A. V. Z. Post	C. G. Bothner	C. G. Bothner	
1896	G. Kavanaugh	A. V. Z. Post	C. G. Bothner	
1897	C. G. Bothner	C. G. Bothner	C. G. Bothner	
1898	No competition			
1899	G. Kavanaugh	M. Diaz	G. Kavanaugh	
1900	F. Townsend	W. D. Lyon	J. L. Erving	
1901	C. Tatham	C. Tatham	A. V. Z. Post	
1902	J. P. Parker	C. Tatham	A. V. Z. Post	
1903	F. Townsend	C. Tatham	A. V. Z. Post	
1904	C. G. Bothner	C. G. Bothner	A. G. Anderson	
1905	C. G. Bothner	W. S. O'Connor	K. B. Johnson	
1906	S. D. Breckinridge	W. Grebe	A. G. Anderson	
1907	C. Waldbott	W. D. Lyon	A. G. Anderson	
1908	W. L. Bowman	P. Benzenberg	G. W. Postgate	
1909	O. A. Dickinson	A. De La Poer	A. E. Sauer	
1910	G. K. Bainbridge	A. De La Poer	J. T. Shaw	
1911	G. H. Breed	G. H. Breed	A. G. Anderson	
1912	S. Hall	A. V. Z. Post	C. A. Bill	A. Baylis
1913	P. J. Meylan	A. E. Sauer	A. G. Anderson	Mrs. W. H. Dewar
1914	S. D. Breckinridge	F. W. Allen	W. Von Blijenburgh	M. Stimson
1915	O. A. Dickinson	J. A. MacLaughlin	S. Hall	J. Pyle
1916	A. E. Sauer	W. H. Russell	S. Hall	Mrs. C. H. Voorhees
1917	S. Hall	L. G. Nunes	A. S. Lyon	F. Walton
1918	No competition			
1919	S. Hall	W. H. Russell	A. S. Lyon	No competition
1920	S. Hall	R. W. Dutcher	S. Hall	A. Gehrig
1921	F. W. Honeycutt	C. R. McPherson	C. R. McPherson	A. Gehrig
1922	H. M. Raynor	L. G. Nunes	L. G. Nunes	A. Gehrig
1923	R. Peroy	G. C. Calnan	L. M. Schoonmaker	A. Gehrig
1924	L. G. Nunes	L. G. Nunes	J. E. Gignoux	Mrs. C. H. Hopper
1925	G. C. Calnan	W. H. Russell	J. Vince	Mrs. L. M. Schoonmaker
1926	G. C. Calnan	L. G. Nunes	L. G. Nunes	Mrs. L. M. Schoonmaker
1927	G. C. Calnan	H. Van Buskirk	N. Muray	S. Stern
1928	G. C. Calnan	L. G. Nunes	N. Muray	M. Lloyd
1929	J. L. Levis	F. S. Righeimer	L. G. Nunes	Mrs. L. M. Schoonmaker
1930	G. C. Calnan	M. Pasche	N. C. Armitage	Mrs. H. Van Buskirk
1931	G. C. Calnan	M. A. de Capriles	J. R. Huffman	M. Lloyd
1932	J. L. Levis	L. G. Nunes	J. R. Huffman	D. Locke
1933	J. L. Levis	G. M. Heiss	J. R. Huffman	D. Locke
1934	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	H. Mayer
1935	J. L. Levis	T. J. Sands	N. C. Armitage	H. Mayer
1936	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	Mrs. J. de Tuscan
1937	J. L. Levis	T. J. Sands	J. R. Huffman	H. Mayer
1938	D. Every	J. R. de Capriles	J. R. Huffman	H. Mayer
1939	N. Lewis	L. Tingley	N. C. Armitage	H. Mayer
1940	D. Every	F. Selbert	N. C. Armitage	H. Mroczkowska
1941	D. Cetrulo	G. M. Heiss	N. C. Armitage	H. Mayer
1942	W. Dow	H. Santos	N. C. Armitage	H. Mayer
1943	W. Dow	R. Driscoll	N. C. Armitage	H. Mroczkowska
1944	A. Snyder	M. A. de Capriles	T. Nyilas	M. Dalton
1945	D. Every	M. Gilman	N. C. Armitage	M. Cerra
1946	J. R. de Capriles	A. Wolff	T. Nyilas	H. Mayer
1947	Dean Cetrulo	James Strauch	James Flynn	Mrs. Helena Dow
1948	Nathaniel Lubell	Norman Lewis	Dean Cetrulo	Mrs. Helena Dow
1949	Daniel Bukantz	Norman Lewis	Umberto Martino	Polly Craus
1950	Silvio Giolito	Norman Lewis	Tibor Nyilas	Janicelee York

WORLD FENCING CHAMPIONS, 1950

INDIVIDUAL

(Woo-and-lost records in parentheses)

Foil—Renzo Nostini, Italy (6-1)

Épée—Mogens Luchow, Denmark (8-1)

Saber—Jean Levavasseur, France (6-1)

Women's foil—Renée Garlille, France, and Mrs. Ellen Muller-Preis, Austria (each 5-2)

TEAM

Foil—Italy

Épée—Italy

Saber—Italy

Women's foil—France

! Women's U. S. Intercollegiate

Individual—Sally Zacharowitz, N. Y. U.

Team—New York University

SOCCER

Source: Flannery News Bureau of New York.

National Challenge Cup Winners

Emblematic of United States
Championship.(Senior amateur and professional eleven eligible for
tournaments.)

1914	Brooklyn (N. Y.) Field Club
1915	Bethlehem (Pa.) Steel Co. F. C.
1916	Bethlehem (Pa.) Steel Co. F. C.
1917	Fall River (Mass.) Rovers
1918	Bethlehem (Pa.) Steel Co. F. C.
1919	Bethlehem (Pa.) Steel Co. F. C.
1920	Ben Miller F. C., St. Louis, Mo.
1921	Robins Dry Dock F. C., Brooklyn, N. Y.
1922	Scullin Steel F. C., St. Louis, Mo.
1923	Paterson (N. J.) F. C.
1924	Fall River (Mass.) F. C.
1925	Shawsheen S. C., Andover, Mass.
1926	Bethlehem (Pa.) Steel Co. F. C.
1927	Fall River (Mass.) F. C.
1928	New York Nationals S. C.
1929	Hakoah A I Stars, New York
1930	Fall River (Mass.) F. C.
1931	Fall River (Mass.) F. C.
1932	New Bedford (Mass.) F. C.
1933	Stix, Baer & Fuller F. C., St. Louis, Mo.
1934	Stix, Baer & Fuller F. C., St. Louis, Mo.
1935	Central Breweries S. C., St. Louis, Mo.
1936	First German American S. C., Philadelphia
1937	New York Americans S. C.
1938	Sparta A. B. A., Chicago, Ill.
1939	St. Mary's Celtic S. C., New York
1940	No official champion*
1941	Pawtucket (R. I.) F. C.
1942	Gallatin S. C., Pittsburgh
1943	Brooklyn (N. Y.) Hispano S. C.
1944	Brooklyn (N. Y.) Hispano S. C.
1945	Brookhattan S. C., New York
1946	Vikings, Chicago
1947	Ponta Delgada F. C., Fall River, Mass.
1948	Joe Simpkins S. C., St. Louis, Mo.
1949	Morgan (Pa.) S. C.
1950	Joe Simpkins S. C., St. Louis, Mo.

* Finalists: Baltimore (Md.) S. C. and Sparta A. B. A., Chicago, Ill.

BRITISH SOCCER CHAMPIONS, 1950

Source: Jim Kelly, 2889 Bainbridge Ave., New York 58, N. Y.

International—England

English

League (Division I)—Portsmouth
 League (Division II)—Tottenham Hotspur
 League (Division III, South)—Notts County
 League (Division III, North)—Doncaster Rovers
 Cup—Arsenal

Scottish

League (Division "A")—Rangers
 League (Division "B")—Morton
 Cup—Rangers

Welsh

League—Merthyr Tydfil

Cup—Swansea Town

Irish

League—Linfield

Cup—Linfield

National Amateur Challenge
Cup Winners

1923	No official champion*
1924	Fleisher Yarn F. C., Philadelphia
1925	Toledo (Ohio) F. C.
1926	Defenders F. C., New Bedford, Mass.
1927	Heidelberg (Pa.) F. C.
1928	No official champion†
1929	Heidelberg (Pa.) F. C.
1930	Raffies F. C., Fall River, Mass.
1931	Goodyear F. C., Akron, Ohio
1932	Shamrock S. C., Cleveland, Ohio
1933	German American S. C., Philadelphia
1934	German American S. C., Philadelphia
1935	W. W. Riehl S. C., Castle Shannon, Pa.
1936	First German S. C., Brooklyn, N. Y.
1937	Highlander F. C., Trenton, N. J.
1938	Ponta Delgada F. C., Fall River, Mass.
1939	St. Michael's A. C., Fall River, Mass.
1940	Morgan-Strasser S. C., Morgan, Pa.
1941	Fall River (Mass.) S. C.
1942	Fall River (Mass.) S. C.
1943	Morgan-Strasser S. C., Morgan, Pa.
1944	Eintracht S. C., New York
1945	Eintracht S. C., New York
1946	Ponta Delgada F. C., Fall River, Mass.
1947	Ponta Delgada F. C., Fall River, Mass.
1948	Ponta Delgada F. C., Fall River, Mass.
1949	Elizabeth (N. J.) Sport Club
1950	Ponta Delgada F. C., Fall River, Mass.

* Medals to semifinals: Fleisher Yarn F. C., Philadelphia; Roxbury (Mass.) F. C.; Jeannette (Pa.) F. C.; Swedish American A. A., Chicago, Ill. † Finalists: Powers-Hudson-Essex F. C., Fall River, Mass.; and Swedish American A. C., Detroit, Mich.

1950 WORLD TITLE TOURNEY

(At Rio de Janeiro and São Paulo, Brazil)

	W.	L.	T.	Pts.
Uruguay	2	0	1	5
Brazil	2	1	0	4
Sweden	1	2	0	2
Spain	0	2	1	1

OTHER U. S. FENCING CHAMPIONS, 1950

Individual

3-weapon—Tibor Nyilas, Salle Santelli, New York

Team

3-weapon—Salle Santelli (Albert Axelrod, Neil Lazar, Norman Lewis, George Worth)

Foil—Fencers Club, New York (Daniel Bukantz, Nathaniel Lubell, Austin Prokop, Charles Steinhart)

Epee—Salle Santelli (Ralph Goldstein, Norman Lewis, Marvin Metzger, Paul Moss)

Saber—New York Athletic Club (James Flynn, Ralph Marson, Nickolas Muray, Samuel Stewart)

Women's foil—Faulkner School, Los Angeles (Polly Craus, Bernadine Meislahn, Janicelee York)

IRISH CHAMPIONS, 1950

Gaelic football—Mayo

Hurling—Tipperary

RIFLE AND PISTOL SHOOTING

Source: Paul B. Cardinal, National Rifle Association of America.

National Outdoor Small-Bore Rifle Records

The X count is used in most small-bore records to break ties. The X-ring on the target is a circle within the 10-ring and in a case where two or more competitors have the same point score, the one with the most X's is declared the winner. (m) Indicates metallic sight used. (a) Indicates any sight used.

INDIVIDUAL METALLIC SIGHTS

Dewar Course—W. B. Woodring.....	400-37X
40 shots, 50 yd.—E. H. Cushing.....	400-39X
40 shots, 100 yd.—Arthur Cook.....	400-37X
40 shots, 50 m.—C. C. Whipple } Robert Perkins	400-34X
20 shots, 200 yd.—C. C. Whipple.....	199-12X

INDIVIDUAL ANY SIGHTS

Dewar Course—Peter Romcovitz.....	400-38X
40 shots, 50 yd.—Otto Kolb.....	400-40+5X
40 shots, 100 yd.—R. Parr } R. H. Dorian John J. Crowley	400-35X
40 shots, 50 m.—Jack Folk.....	400-39X
20 shots, 200 yd.—A. F. Goldsborough..	200-14X

AGGREGATE

(40 shots at 50 yd., 100 yd., 50 meters, and Dewar Course)

Metallic sights—Dave Carlson.....	1600-114X
Any sights—Robert Perkins.....	1600-128X
Total of both—J. J. Crowley.....	3195-236X

FOUR-MAN TEAM (DEWAR COURSE)

Metallic sights—Glendale S. C.....	1593-105X
Any sights—Becker Chapman Club....	1598-119X
Junior (m)—Pinwheel Jr. R. C.....	1570-73X
Junior (a)—Pinwheel Jr. R. C.....	1579-75X
Women (m)—Los Angeles "Babes"....	1569-77X
Women (a)—Los Angeles "Babes"....	1581-91X

National Outdoor Pistol Records

(s)—Slow fire; (t)—timed fire; (r)—rapid fire.

INDIVIDUAL .22 CALIBER

50 yd. (s)—Harry Reeves.....	198
25 yd. (t)—Harry Reeves.....	200+80 10's
25 yd. (r)—Huelet L. Benner.....	200+25 10's
Camp Perry Course—Huelet L. Benner	300+10 10's
National Match Course—Huelet L. Benner	298

INDIVIDUAL CENTER FIRE (.38 CALIBER)

50 yd. (s)—Harry Reeves.....	198
25 yd. (t)—Harry Reeves.....	200+50 10's
25 yd. (r)—J. E. Clark } Emmett E. Jones T. E. Banier	200
Camp Perry Course—Emmett E. Jones.....	299
National Match Course—Alfred W. Hemming	298

INDIVIDUAL .45 CALIBER

50 yd. (s)—Huelet L. Benner.....	197
25 yd. (t)—U. O. Drexel } Harry Reeves	200+5 10's
25 yd. (r)—Harry Reeves.....	199
Camp Perry Course—Harry Reeves } Don Mullican	297
National Match—Harry Reeves } Course M. W. Billing	295

INDIVIDUAL AGGREGATE

(Slow, timed, rapid and National Match Course)

.22 caliber—Huelet L. Benner.....	831
Center fire—T. E. Banier.....	833
.45 caliber—Huelet L. Benner.....	882
Three caliber—Harry Reeves.....	2627

INDIVIDUAL METALLIC SIGHTS (JUNIOR)

Dewar Course—Arthur Cook.....	400-32X
40 shots, 50 yd.—Joe Specht.....	400-36X
40 shots, 100 yd.—Richard W. Waters..	400-23X
40 shots, 50 m.—John Symmes.....	299

INDIVIDUAL ANY SIGHTS (JUNIOR)

Dewar Course—Arthur Cook.....	400-30X
40 shots, 50 yd.—Earl Taylor.....	400-36X
40 shots, 100 yd.—Miss Audrey Bockmann.....	400-31X
40 shots, 50 m.—David Rosenberg.....	400-34X

INDIVIDUAL METALLIC SIGHTS (WOMEN)

Dewar Course—Cora Converse.....	400-30X
40 shots, 50 yd.—Elma Cornish.....	400-35X
40 shots, 100 yd.—Anna Lou Barker....	400-23X
40 shots, 50 m.—May E. Kell.....	400-29X
20 shots, 200 yd.—Mrs. L. P. Bartlett..	194-6X

INDIVIDUAL ANY SIGHTS (WOMEN)

Dewar Course—May E. Kell } Ruth E. Davis Ruth Beals	400-31X
40 shots, 50 yd.—Viola E. Pollum.....	400-37X
40 shots, 100 yd.—Ruth Johnson.....	400-34X
40 shots, 50 m.—Adelaide McCord.....	400-36X
20 shots, 200 yd.—Mrs. L. P. Bartlett..	197-4X

FOUR-MAN TEAM

.22 Camp Perry Course—Los Angeles Police...	1187
.22 National Match Course—U. S. Treasury...	1172
Center fire, Camp Perry Course—U. S. Treasury...	1183
Center fire, Nat'l Match Course—U. S. Marine Corps.....	1166
.45 Camp Perry Course—So. Calif. Civilians.....	1163
.45 National Match—Detroit Police.....	1140

INDIVIDUAL .22 CALIBER (WOMEN)

50 yd. (s)—Esther Sichter } Gloria Norton	190
25 yd. (t)—Gloria Norton.....	200
25 yd. (r)—Gloria Norton.....	198
Camp Perry Course—Gloria Norton.....	299
National Match Course—Gloria Norton.....	296

INDIVIDUAL CENTER FIRE (WOMEN)

50 yd. (s)—Gloria Norton.....	189
25 yd. (t)—Gloria Norton.....	199
25 yd. (r)—Gloria Norton.....	192
Camp Perry Course—Gloria Norton.....	298
National Match Course—Virginia Fontanella.	290

INDIVIDUAL .45 CALIBER (WOMEN)

50 yd. (s)—Bobby Rutherford } Virginia Fontanella	174
25 yd. (t)—Gloria Norton.....	195
25 yd. (r)—Gloria Norton.....	182
National Match Course—Gloria Norton.....	277

MALE ATHLETE-OF-THE-YEAR

(Associated Press poll)

Year	Winner	Sport	Year	Winner	Sport
1931	Pepper Martin.....	Baseball	1940	Tommy Harmon.....	Football
1932	Gene Sarazen.....	Golf	1941	Joe DiMaggio.....	Baseball
1933	Carl Hubbell.....	Baseball	1942	Frank Sinkwich.....	Football
1934	Dizzy Dean.....	Baseball	1943	Gunder Hagg.....	Track
1935	Joe Louis.....	Boxing	1944	Byron Nelson.....	Golf
1936	Jesse Owens.....	Track	1945	Byron Nelson.....	Golf
1937	Don Budge.....	Tennis	1946	Glenn Davis.....	Football
1938	Don Budge.....	Tennis	1947	Johnny Lujack.....	Football
1939	Nile Kinnick.....	Football	1948	Lou Boudreau.....	Baseball
			1949	Leon Hart.....	Football

ICE (FIGURE) SKATING

Source: Art Goodfellow, Editor, *National Ice Skating Guide*, 110 East 42d St., New York 17, N. Y.

WORLD CHAMPIONS

Year	Men	Women
1896	Gilbert Fuchs, Germany	
1897	Gustav Hugel, Austria	
1898	H. Grenander, Sweden	
1899	Gustav Hugel, Austria	
1900	Gustav Hugel, Austria	
1901	Ulrich Salchow, Sweden	
1902	Ulrich Salchow, Sweden	
1903	Ulrich Salchow, Sweden	
1904	Ulrich Salchow, Sweden	
1905	Ulrich Salchow, Sweden	
1906	Gilbert Fuchs, Germany	Madge Syers, England
1907	Ulrich Salchow, Sweden	Madge Syers, England
1908	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1909	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1910	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1911	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1912	Fritz Kachler, Austria	Meray Horvath, Hungary
1913	Fritz Kachler, Austria	Meray Horvath, Hungary
1914	Gosta Sandahl, Sweden	Meray Horvath, Hungary
1915-21	No competition	No competition
1922	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1923	Fritz Kachler, Austria	Mrs. Szabo Plank, Austria
1924	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1925	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1926	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1927	Willi Boeckl, Austria	Sonja Henie, Norway
1928	Willi Boeckl, Austria	Sonja Henie, Norway
1929	Gillis Grafstrom, Sweden	Sonja Henie, Norway
1930	Karl Schafer, Austria	Sonja Henie, Norway
1931	Karl Schafer, Austria	Sonja Henie, Norway
1932	Karl Schafer, Austria	Sonja Henie, Norway
1933	Karl Schafer, Austria	Sonja Henie, Norway
1934	Karl Schafer, Austria	Sonja Henie, Norway
1935	Karl Schafer, Austria	Sonja Henie, Norway
1936	Karl Schafer, Austria	Sonja Henie, Norway
1937	Felix Kaspar, Austria	Cecilia Colledge, England
1938	Felix Kaspar, Austria	Megan Taylor, England
1939	Graham Sharp, England	Megan Taylor, England
1940-46	No competition	No competition
1947	Hans Gerschweiler, Switzerland	Barbara A. Scott, Canada
1948	Richard Button, U. S.	Barbara A. Scott, Canada
1949	Richard Button, United States	Aja Vrzanova, Czechoslovakia
1950	Richard Button, U. S.	Aja Vrzanova, Czech.

UNITED STATES CHAMPIONS

Year	Men	Women
1914	Norman Scott	Theresa Weld
1915-17	No competition	No competition
1918	Nathaniel Niles	Mrs. R. S. Beresford
1919	No competition	No competition
1920	Sherwin Badger	Theresa Weld
1921	Sherwin Badger	Theresa Blanchard
1922	Sherwin Badger	Theresa Blanchard
1923	Sherwin Badger	Theresa Blanchard
1924	Sherwin Badger	Theresa Blanchard
1925	Nathaniel Niles	Beatrix Loughran
1926	C. I. Christenson	Beatrix Loughran
1927	Nathaniel Niles	Beatrix Loughran
1928	Roger Turner	Maribel Y. Vinson
1929	Roger Turner	Maribel Y. Vinson
1930	Roger Turner	Maribel Y. Vinson
1931	Roger Turner	Maribel Y. Vinson
1932	Roger Turner	Maribel Y. Vinson
1933	Roger Turner	Maribel Y. Vinson
1934	Roger Turner	Suzanne Davis
1935	Robin Lee	Maribel Y. Vinson
1936	Robin Lee	Maribel Y. Vinson
1937	Robin Lee	Maribel Y. Vinson
1938	Robin Lee	Joan Tozzer
1939	Robin Lee	Joan Tozzer
1940	Eugene Turner	Joan Tozzer
1941	Eugene Turner	Jane Vaughn
1942	Bobby Specht	Jane V. Sullivan
1943	Arthur R. Vaughn, Jr.	Gretchen Merrill
1944	Omitted	Gretchen Merrill
1945	Omitted	Gretchen Merrill
1946	Richard Button	Gretchen Merrill
1947	Richard Button	Gretchen Merrill
1948	Richard Button	Gretchen Merrill
1949	Richard Button	Yvonne Sherman
1950	Richard Button	Yvonne Sherman

OTHER U. S. CHAMPIONS, 1950

Pairs—Karol Kennedy-Peter Kennedy, Seattle
 Fours—St. Paul F.S.C. (Janet Gerhauser, Marilyn Thomsen, John S. Nightingale, Marilyn Thomsen)
 Gold dance—Lois Waring-Michael McGean, Baltimore
 Silver dance—Carol Ann Peters-Daniel Ryan, Washington D. C.

JUNIOR

Men—Donald Laws, Washington, D. C.
 Women—Tenley Albright, Boston
 Pairs—Janet Gerhauser-John S. Nightingale

NOVICE

Men—Ronald Robertson, Berkeley, Calif.
 Women—Patricia Quick, Berkeley, Calif.

OTHER CHAMPIONS, 1950

World

Pairs—Karol Kennedy-Peter Kennedy, United States
 Dance—Lois Waring-Michael McGean, United States

European

Men—Ede Kiraly, Hungary
 Women—Aja Vrzanova, Czechoslovakia
 Pairs—Marianne Nagy-Laszlo Nagy, Hungary

Canadian

Men's senior—Roger Wickson, Vancouver
 Women's senior—Suzanne Morrow, Toronto
 Senior pairs—Marlene E. Smith-Donald Gilchrist, Toronto
 Men's junior—Peter Firstbrook, Toronto
 Women's junior—Barbara Gratton, Toronto
 Junior pairs—Jane Kirby-Donald Tobin, Ottawa
 Waltz—Frances Dafoe-Norris Bowden, Toronto
 Silver dance—Pierrette Paquin-Donald Tobin, Ottawa
 Tenstep dance—Joy Forsyth-W. A. de Nance, Toronto

BOBSLEDDING

1950 World Championships

(At Cortina D'Ampezzo, Italy)

Four-man—United States (Stan Benham, Lake Placid, N. Y.; Pat Martin, Massena, N. Y.; Jim Atkinson, Rome, N. Y.; Bill D'Amico, Lake Placid, N. Y.)..... 5:28.72*
 Two-man—Fritz Feierabend-Stefan Waser, Switzerland..... 5:57.73†

* Total time for four runs down 1,648-meter course.
 † Total time for four runs down 1,760-meter course.

ICE (SPEED) SKATING

WORLD RECORDS

Source: International Skating Union (I.S.U.).

MEN				
Meters	Time	Recordholder and country	Where made	Date
500.....	41.8.....	H. Engestangen, Norway.....	Davos, Switz.....	Feb. 5, 1938
1,000.....	1:28.4.....	Cl. Thunberg, Finland.....	Davos, Switz.....	Jan. 11, 1930
1,500.....	2:13.8.....	H. Engestangen, Norway.....	Davos, Switz.....	Jan. 29, 1939
3,000.....	4:45.7.....	Ake Seyffarth, Sweden.....	Davos, Switz.....	Feb. 3, 1942
5,000.....	8:13.5.....	Kornel Pajor, Hungary.....	Davos, Switz.....	Feb. 5, 1949
10,000.....	16:57.4.....	Hjalmar Andersen, Norway.....	Davos, Switz.....	Feb. 6, 1949

WOMEN				
500.....	46.4.....	Laila Schou-Nilsen, Norway.....	Davos, Switz.....	Jan. 30, 1937
1,000.....	1:39.8.....	Laila Schou-Nilsen, Norway.....	Davos, Switz.....	Jan. 31, 1937
1,500.....	2:38.1.....	Laila Schou-Nilsen, Norway.....	Oslo, Norway.....	Jan. 23, 1937
3,000.....	5:29.1.....	Zoja Holschtschewnikowa, U.S.S.R.....	Moscow, U.S.S.R.....	Jan. 30, 1949
5,000.....	9:26.8.....	Verne Lesche, Finland.....	Kongsberg, Norway.....	Feb. 13, 1949

NATIONAL SENIOR AMATEUR RECORDS

(Made in competition)

Source: Amateur Skating Union of the United States.

MEN'S OUTDOOR					MEN'S INDOOR				
Event	Time	Holder	Place	Date	Event	Time	Holder	Place	Date
220 yd...	18.1	Robert Fitzgerald.....	Minneapolis.....	1/10/43	220 yd....	18	F. Robson.....	Boston.....	1/13/11
440 yd...	35.4	Charles Gorman.....	Lake Placid.....	2/14/27	1/6 mi....	23.8	C. Gorman.....	St. John*.....	3/1/27
		Ken Bartholomew.....	St. Paul.....	1/25/42	440 yd....	36.8	C. Gorman.....	St. John.....	2/27/25
	35.4	Robert Fitzgerald.....	Minneapolis.....	2/15/42	880 yd....	1:15.6	B. O'Sickey.....	Pittsburgh.....	3/1/16
880 yd....	1:14.2	Robert Fitzgerald.....	Minneapolis.....	1/7/45	3/4 mi....	2:00.4	P. Johnston.....	Cleveland.....	3/2/28
3/4 mi....	1:55.8	Clas Thunberg.....	Saranac Lake.....	2/15/26	1 mi.....	2:41.2	Morris Wood— F. Robson.....	Pittsburgh.....	2/13/04
1 mi.....	2:38.2	Clas Thunberg.....	Lake Placid.....	2/12/26	1 1/2 mi....	4:25	Edmund Lamy.....	Cleveland.....	1/27/10
* 1 mi....	2:29.7	Del Lamb.....	Oslo.....	2/19/48	2 mi.....	5:54.8	R. Heckenbach.....	St. Paul.....	1/30/37
2 mi.....	5:33.8	Eddie Schroeder.....	Minneapolis.....	1/30/34	3 mi.....	8:58.8	P. Johnston.....	Pittsburgh.....	2/19/27
3 mi.....	8:19.6	Ross Robinson.....	Lake Placid.....	2/14/30	4 mi.....	13:41.8	Joe Moore.....	Brooklyn.....	2/7/27
5 mi.....	14:30.4	Ross Robinson.....	Lake Placid.....	2/12/27	5 mi.....	15:42.2	F. Stack.....	Chicago.....	2/8/30

* Made on 400-meter track in Norway.

WOMEN'S OUTDOOR					WOMEN'S INDOOR				
220 yd...	20.2	Maddy Horn.....	Saranac Lake.....	2/11/39	220 yd....	21.6	Dot Franey.....	St. Paul.....	2/15/36
440 yd....	39.4	L. Neitzel.....	Minneapolis.....	2/3/29	1/6 mi....	31.0	Dot Franey.....	St. Louis.....	2/25/33
880 yd....	1:25.9	Maddy Horn.....	Escanaba*.....	1/13/40	440 yd....	41.6	Dot Franey.....	St. Paul.....	2/16/36
3/4 mi....	2:17	Dot Franey.....	Minneapolis.....	1/16/37	880 yd....	1:27	Leila B. Potter.....	Pittsburgh.....	3/6/26
1 mi.....	3:06.1	Maddy Horn.....	Oconomowoc†.....	1/24/37	3/4 mi....	2:18.1	Kit Klein.....	Chicago.....	2/2/35
					1 mi.....	3:15.6	Maddy Horn.....	Chicago.....	4/1/38

* Michigan. † Wisconsin.

* New Brunswick, Canada.

1950 SPEED SKATING CHAMPIONS

World

(At Eskilstuna, Sweden, Feb. 18-19)

All-around—Hjalmar Andersen, Norway.....	210,580 pts.
500 meters—John Werket, United States.....	0:47.3
1,500 meters—John Werket.....	2:32.1
5,000 meters—Hjalmar Andersen.....	9:15.4
10,000 meters—Hjalmar Andersen.....	17:40.8

North American Outdoor

(At Pittsfield, Mass., Feb. 3-5)

SENIOR MEN

220 yd.—Gordon Audley, Winnipeg, Manitoba.....	0:20
440 yd.—Donald Hamer, Minneapolis.....	0:36.7
880 yd.—Al Broadhurst, Roslindale, Mass.....	1:42.2
3/4 mile—Ray Blum, Nutley, N. J.....	2:23
Mile—Ray Blum.....	3:19.9
2 miles—Charles Burke, Chicago.....	6:16.2
5 miles—Charles Burke.....	15:55.3
Champion—Ray Blum.....	130 pts.

SENIOR WOMEN

220 yd.—Betty Mitchell, Winnipeg.....	0:24.2
440 yd.—Florence Carter, Saginaw, Mich.....	0:42.2
880 yd.—Janice Christopherson, St. Paul.....	1:43.7
3/4 mile—Betty Mitchell.....	2:37.1
Mile—Janice Christopherson.....	3:48.1
Champion—Betty Mitchell.....	120 pts.

United States Outdoor

(At St. Paul, Minn., Jan. 28-29)

SENIOR MEN

220 yd.—Bobby Fitzgerald, Minneapolis.....	0:19.9
440 yd.—Bobby Fitzgerald.....	0:37.2
880 yd.—Bobby Fitzgerald.....	1:34.2
3/4 mile—Ray Blum, Nutley, N. J.....	2:12.6
Mile—Bob Hall, Providence, R. I.....	3:03.2
2 miles—Ken Bartholomew, Minneapolis.....	6:18.7
5 miles—Ken Bartholomew.....	16:29.6
Champion—Ken Bartholomew.....	110 pts.

1950 SPEED SKATING CHAMPIONS (cont.)

SENIOR WOMEN

220 yd.—Florence Carter, Saginaw, Mich.....	0:22.7
440 yd.—Florence Carter.....	0:43.2
880 yd.—Janice Christopherson, St. Paul.....	1:45.8
1/4-mile—Janice Christopherson.....	2:24.6
1/2-mile—Janice Christopherson.....	3:25.8
Champion—Janice Christopherson.....	90 pts.

North American Indoor

Men—Edward Dame, Revere, Mass.....	110 pts.
Women—Barbara Marchetti, Wyandotte, Mich.....	120 pts.

United States Indoor

Men—Emanuel Babayan, Pasadena, Calif.....	110 pts.
Women—Barbara Marchetti, Wyandotte, Mich.....	120 pts.

Middle Atlantic

Men—Ray Blum, Nutley, N. J.....	105 pts.
Women—Adrina Lebel, Lake Placid, N. Y.....	80 pts.

LACROSSE

1950 Champions

National Open—Mt. Washington Club, Baltimore.
National intercollegiate—Johns Hopkins.

1950 North-South Game

(At College Park, Md.)

NORTH (12)

Attack—S. (Princeton), Gates (Dartmouth), Powell (Rutgers), Satterley (Hobart), Epler (Cornell), Gladwin (Rutgers).
Midfield—Timberman (Yale), Armstrong (R.P.I.), Coons (R.P.I.), Fuller (Syracuse), Cody (Syracuse), Louis (Penn State), Weinberger (C.C.N.Y.), Fredericks (Stevens Tech).
Defense—Yellott (Yale), Balderston (Dartmouth), Erdman (Princeton), Hubbard (Army), Hayward (Tufts).
Goal—Merritt (Syracuse) O'Connell (Williams).

SOUTH (8)

Attack—Fewster (Johns Hopkins), Tongue (Washington & Lee), Lowry (Maryland), Bierman (Delaware), Whelan (Loyola), Hoffman (Washington).
Midfield—Adams (Johns Hopkins), Sandell (Johns Hopkins), Herbert (Maryland), Helss (Duke), Stier (Drexel), Moulden (Maryland), Jackson (Washington), A. Hill (Washington & Lee).
Defense—Bunting (Johns Hopkins), Prouett (Virginia), Ryan (Navy), Pacy (Washington & Lee), Heller (Duke), Lynch (North Carolina).
Goal—Clements (Washington & Lee), Barry (Loyola).

SCORE BY PERIODS

North.....	3	6	2	1—12
South.....	1	1	2	4—8

Scoring: North—Gates, Powell 2, Satterley, Timberman, Armstrong, Coons 2, Fuller 2, Cody, Louis. South—Fewster, Tongue 2, Lowry, Sandell, Herbert 2, Helss.

Referees—Charles Ellinger (South) and Henry Ford (North). Time of periods—15 minutes.

North-South Game Record

1940—North 6, South 5	1946—North 14, South 14
1941—North 7, North 6	1947—North 15, South 3
1942—North 6, South 3	1948—North 11, South 6
1943—South 9, North 5	1949—South 11, North 6
1944-45—No games	1950—North 12, South 8

1950 All-America Selections

FIRST TEAM

Goal—William Clements, Washington and Lee; defense—Phil Ryan, Navy; defense—Lloyd Bunting, Johns Hopkins; defense—Kinloch Yellott, Yale; midfield—Robert Sandell, Johns Hopkins; midfield—William Fuller, Syracuse; midfield—Richard Coons, Rensselaer Poly; attack—William Hooper, Virginia; attack—Richard E. Powell, Rensselaer Poly; attack—Don Hahn, Princeton.

European

(At Helsinki, Finland, Feb. 4-5)

All-around—Hjalmar Andersen, Norway.....	199.313 pts.
500 meters—Hjalmar Andersen.....	0:46.1
1,500 meters—Hjalmar Andersen.....	2:24.4
5,000 meters—Hjalmar Andersen.....	8:32.4
10,000 meters—Reidar Liaklev, Norway.....	17:55.5

Retains Speed Skating Title

Marija Isakova of Russia, with 230.990 points successfully defended her women's world all-around speed skating championship in 1950 at Moscow. The U.S.S.R. titleholder scored her only victory in the 500 meters, finished second in the 5,000 meters and third in the 3,000 meters. She was seventh in the 1,500 meters, the other event on the program.

LAWN BOWLING, 1950

National Champions

Singles—Richard J. Folkins, Arroyo Seco L. B. C., Los Angeles
Doubles—Hugh Folkins, Redlands (Calif.) L. B. C.
Triples—Hugh Folkins, Edward McGee, Arroyo Seco; Richard J. Folkins

Divisional Champions

EASTERN

Rink—Bridgeport, Conn. (Duane R. Barrett, William J. Jackson, Sidney B. Dargie, Simpson Crowe)
Doubles—Frank Hamilton-George Hope, Essex County, Bloomfield, N. J.
Singles—Richard Auld, Hyde Park, Niagara Falls, N. Y.

CENTRAL

Rink—Columbus Park, Chicago (Dave Greenough, David Campbell, O. Simpson, Martin Carlson)
Doubles—Hugh Crerar-William Crerar, Columbus Park
Singles—David Campbell.

SOUTHERN CALIFORNIA

Triples—Beverly Hills (A. Emerson Newman, John Bjorstad, W. G. "Bill" Hay)
Doubles—Chet Sheere-F. Jorgenson, Riverside
Singles—Harry Burton, Arroyo Seco

NORTHWEST

Rink—Dr. Raymond J. Cary, Recreation Park, Long Beach; Sherman Mix, Long Beach L. B. C.; W. G. Hay, Beverly Hills; Len Hughes, Arroyo Seco
Men's doubles—Jim McCallum-Ivan Dickinson, Bellingham (Wash.)
Men's singles—Scott Keenlyside, Terminal, Vancouver, B. C.
Champion of champions—Jack Smith, Portland (Ore.)
Women's doubles—Mabel Dunckley-Bessie Thomas, Tacoma (Wash.)
Women's singles—Mrs. Fred Ellis, Kerrisdale, Vancouver, B. C.

Tour de France to Kubler

Ferdinand Kubler of Switzerland won the 1950 renewal of the Tour de France, cycling's outstanding event. Kubler was clocked in 145 hours 36 minutes 56 seconds for the grind of approximately 3,020 miles. Constant Ockers of Belgium finished second, nine and a half minutes behind the victor, and Louison Bobet of France was third.

Mercersburg (Pa.) Academy won the 1950 National A. A. U. prep school indoor track and field team championship and Boys High of Brooklyn took the high school title.

WORLD ALL-TACKLE FISHING RECORDS

Caught with Rod and Reel in Salt Water

Source: International Game Fish Association, Francesca LaMonte, Secretary.

Species	Lib., oz.	Length	Girth	Where caught	Year	Angler
Albacore	66—4	.....	.....	Catalina, California	1912	Frank Kelly
Amberjack	106	68½"	37"	Pass-a-Grille, Florida	1937	Harvey M. Harker
Barracuda	103—4	66"	31½"	West End, Bahamas	1932	C. E. Benet
Bass, Calif. White Sea	77—4	61"	33"	San Diego, Calif.	1950	H. P. Bledsoe
Bass, Channel	83	52"	29"	Cape Charles, Va.	1949	Zack Waters, Jr.
Bass, Giant Black Sea	306	.....	.....	Catalina, Calif.	1935	S. Bagby
Bass, Giant Sea	551	100"	.....	Galveston Bay, Texas	1937	G. Pangarakis
Bass, Striped	73	60"	30½"	Vineyard Sound, Mass.	1913	C. B. Church
Bluefish	14—11½	36½"	18"	Barnegat Jetty, N. J.	1950	R. B. Rothschild
Bonefish	16	38"	17½"	West Molokai, T. H.	1948	C. M. Cooke III
Bonito, Oceanic	31—8	35"	26"	Miami Beach, Fla.	1949	R. Lindquist
Cobia	102	70"	34"	Cape Charles, Va.	1938	J. E. Stansbury
Cod	57—8	56"	.....	Ambrose Lightship, N. Y.	1949	J. Rzeszewicz
Dolphin	67—8	68½"	37½"	Waianae, T. H.	1940	Fred McNamara
Drum, Black	87—8	52"	36"	Cape Charles, Va.	1950	Mrs. H. A. Bradley, Jr.
Flounder, Summer	20	37"	32"	Oak Beach, N. Y.	1948	F. H. Kessel
Kingfish (King Mackerel)	73—8	62"	32"	Bimini, Bahamas	1935	L. B. Harrison
Marlin, Blue	742	154½"	68"	Bimini, Bahamas	1949	A. Wichfield
Marlin, Pacific Black	976	152"	74"	Bay of Islands, N. Z.	1926	Capt. Laurie Mitchell
Marlin, Silver	618	138"	62"	Tahiti	1930	Zane Grey
Marlin, Striped	632	161"	.....	Balboa, California	1931	A. Hamann
Marlin, White	161	104"	33"	Miami, Florida	1938	L. F. Hooper
Permit	39—8	41"	32"	Bimini, Bahamas	1947	E. T. Ragsdale
Pollack	16	39½"	29½"	Long Key, Fla.	1946	H. P. Clark
Roosterfish	36	34"	21"	Watch Hill Reef, R. I.	1950	G. A. Albrecht
Sailfish, Atlantic	66	54½"	35"	Bahia de Los Angeles, Mexico	1949	W. R. Good
Sailfish, Pacific	123	44"	32½"	Walker Cay, Bahamas	1950	H. Teeter
Sawfish	221	129"	.....	Santa Cruz Is., Galapagos	1947	C. W. Stewart
Shark, Mako	736	175"	.....	Galveston, Texas	1938	Gus Pangarakis
Shark, Porbeagle	1000	144"	.....	Mayor Island, N. Z.	1943	B. D. H. Ross
Shark, Thresher	260	48"	68½"	Durban, S. Africa	1949	J. L. Daniel
Shark, Tiger	922	166"	93"	Bay of Islands, N. Z.	1937	W. W. Dowling
Shark, White	1382	166"	93"	Sydney Heads, Australia	1939	Lyle Bagnard
Snook (Robalo)	1919	176"	96½"	Kangaroo Island, Australia	1941	G. R. Cowell
Swordfish	50—8	55"	.....	Gatun Spillway, Canal Zone	1944	J. W. Anderson
Tarpon	860	165"	70"	Tocopilla, Chile	1940	W. E. S. Tucker
Tuna, Albion	247	89½"	.....	Panuco River, Mexico	1938	H. W. Sedgwick
Tuna, Bluefin	265	73"	53"	Makua, Hawaii	1937	J. W. Harvey
Wahoo	977	116"	94½"	St. Ann Bay, Nova Scotia	1950	D. McI. Hodgson
Weakfish	133—8	83"	31"	Green Cay, Bahamas	1943	K. L. Ames, Jr.
Weakfish, Spotted	17—8	46"	19"	Mullica River, N. J.	1944	A. Welsbecker, Jr.
Yellowtail	15—3	34½"	20½"	Fort Pierce, Fla.	1949	C. W. Hubbard
	90	59"	35½"	La Paz, Mexico	1948	F. Hickey

Caught with Rod and Reel in Fresh Water

Source: Field & Stream, 515 Madison Avenue, New York 22, N. Y.

Black Bass, Largemouth	22—4	32½"	28½"	Montgomery Lake, Ga.	1932	George W. Perry
Bluegill (Sunfish)	4—12	15"	18½"	Ketona Lake, Ala.	1950	T. S. Hudson
Carp	42	42"	29"	Rappahannock River, Va.	1930	Robert W. Harris
Catfish, Blue	94—8	56"	35"	James River, S. D.	1949	Roy A. Groves
Catfish, Channel	55	50"	27"	James River, S. D.	1949	Roy A. Groves
Muskelunge	67—8	60½"	33½"	Lac Court O' Reilles, Hayward, Wis.	1949	Cal Johnson
Perch, Yellow	4—3½	.....	.....	Bordentown, New Jersey	1865	Dr. C. C. Abbot
Pickereel, Eastern chain	9	30"	15"	Green Pond, N. J.	1948	Russell Kimble
Pike, Northern	46—2	52½"	25"	Sacandaga Reservoir, N. Y.	1940	Peter Dubuc
Pike, Walleyed	22—4	36½"	21"	Fort Erie, Ontario	1943	Patrick E. Noon
Salmon, Atlantic	79—2	.....	.....	Tanaue, Norway	1928	Henrikson
Salmon, Chinook	83	.....	.....	Umpqua River, Oregon	1910	F. R. Steel
Salmon, Landlocked	22—8	36"	.....	Sebago Lake, Maine	1907	Edward Blakely
Trout, Brook	14—8	.....	.....	Nipigon River, Ontario	1916	Dr. W. J. Cook
Trout, Brown	39—8	.....	.....	Loch Awe, Scotland	1866	W. Muir
Trout, Cutthroat	41	39"	.....	Pyramid Lake, Nevada	1925	John Skimmerhorn
Trout, Dolly Varden	29—4	36½"	24½"	Pend Oreille Lake, Idaho	1947	R. C. Worst
Trout, Lake	63	47½"	.....	Lake Athapapuskow, Manitoba	1930	Miss L. L. Hayes
Trout, Rainbow or Steelhead	37	40½"	28"	Pend Oreille Lake, Idaho	1947	Wes Hamlet
Trout, Sunapee	8	28½"	19"	Lake Sunapee, N. H.	1948	Thorsten B. Lind

FLY AND BAIT CASTING

Source: Charles S. Lacey, Executive Secretary, National Association of Angling and Casting Clubs.

WORLD RECORDS

Official Distance Events

	Feet
Trout fly (average)—Dick Miller, San Diego, Calif.....	176½
Trout fly (long cast)—Dick Miller.....	183
Salmon fly (average)—Jimmie Green, San Francisco.....	198½
Salmon fly (long cast)—Jimmie Green.....	206
½-oz. bait (average)—Earl Osten, Long Beach, Calif.....	409½
½-oz. bait (long cast)—Wilbur Brooks, Indianapolis.....	427
½-oz. bait (average)—Clarence Anthes, Waukesha, Wis.....	359½
½-oz. bait (long cast)—Clarence Anthes.....	385

Official Accuracy Events

Frank Steel, Chicago	100
Dry fly—Allan Childers, San Francisco	
Marvin Allen, Chicago	

Wet fly—Held by 22 casters.....	100
½-oz. bait—J. A. Halbeib, Louisville, Ky.....	100
½-oz. bait—Adele McDonald, Chicago.....	99
Charles Sutphin, Indianapolis.....	

Combined Events Recordholders

All-accuracy—Earl Osten.....	389 pts.
Charles Sutphin.....	
Lou Guerin, San Francisco.....	
Accuracy flies—Ed Tassie, San Francisco.....	198 pts.
Accuracy baits—Charles Sutphin.....	197 pts.
All-distance—Earl Osten.....	3145 ft.
Distance baits—Lee Seas, New Orleans.....	2174 ft.
Distance flies—Dick Miller, San Diego, Calif.....	1091 ft.

National Champions, 1950

Asterisk (*) indicates new record.

Combined

All-around—Earl Osten, Long Beach, Calif.....	
All-distance—Earl Osten.....	3080 ft.
All-accuracy—Marion Garber, Toledo.....	389
Distance baits—Earl Osten.....	2072 ft.
Distance flies—Myron Gregory, San Francisco.....	1025 ft.
Accuracy baits—Marion Garber.....	195
Accuracy flies—Ray Langley, San Francisco.....	198

WOMEN

All-accuracy—Dot Vogel, Paterson, N. J.....	*387
Accuracy baits—Dot Vogel.....	189
Accuracy flies—Dot Vogel.....	*198

JUNIORS

All-accuracy—Tim Hubbard, San Diego, Calif.....	373
Accuracy flies—Kelly Robinson, San Diego.....	193
Accuracy baits—Buddy Laden, Dallas.....	193

Distance Events

	Avg., feet	Long cast
½-oz. bait—Ben Rice, Oakland, Calif.....	329	334
½-oz. bait—Doug Merrick, San Francisco.....	377½	383
Trout fly—Phil Miravalle, San Francisco.....	160½	166
Salmon fly—Myron Gregory.....	187	191

Accuracy Events

	Score
Dry fly—Allan Childers, San Francisco.....	100
Wet fly—Clem Forcade, St. Louis.....	100
½-oz. bait—Marion Garber.....	98
½-oz. bait—Marion Garber.....	97

ROLLER DERBY

National League

FINAL 1949-50 STANDING OF THE TEAMS

	W.	L.	Pct.
Philadelphia Panthers.....	109	92	.542
New York Chiefs.....	107	95	.529
Jersey Jokers.....	104	96	.521
Brooklyn Red Devils.....	106	105	.505
Chicago Westerners.....	97	104	.482
Washington Jets.....	88	117	.425

* Won title play-offs.

WOMEN

Dry fly—Dot Vogel.....	98
Wet fly—Dot Vogel.....	100
½-oz. bait—Joan Salvato, Paterson, N. J.....	95
½-oz. bait—Dot Vogel.....	94

JUNIORS

Dry fly—Kelly Robinson.....	96
Wet fly—Jon Tarantino, San Francisco.....	98
½-oz. bait—Buddy Laden.....	96
½-oz. bait—Buddy Laden.....	97

Fishermen's Events

All-around—John Dieckman, Paterson, N. J.....	
½-oz. dist. bait—Bryant Black, Dallas.....	222 avg. 230 long
Comb. fly—John Dieckman.....	140
Distance fly—Marion Garber.....	131½ avg. 137 long
½-oz. bait accuracy—Marion Garber.....	80

WOMEN

Comb. fly—Joan Salvato.....	124
½-oz. bait accuracy—Dot Vogel.....	66

JUNIORS

Comb. fly—Jon Tarantino.....	86
½-oz. bait accuracy—Buddy Laden.....	70

Five-Man Team Event

Golden Gate Angling and Casting Club

Club Pennant

Golden Gate Angling and Casting Club..... 58 pts.

Ling Lowers Marathon Marks

Wang Chen Ling, a 38-year-old Chinese distance runner from Hong Kong won the second annual Berkeley (Calif.) marathon last August in 2 hours 28 minutes 29 seconds, a half hour ahead of his nearest rival. Ling's time for the 26-mile 385-yard course was better than the Olympic mark of 2:29:19 and the Pacific Coast record, but in 1930 Karl Kosk of the Finnish-American A. C., New York, ran the distance in 2:25:21.5, the present American mark.

SKEET SHOOTING

Source: National Skeet Shooting Association

National Championships, 1950

(At Dallas, Texas, July 31 to Aug. 6)

High-over-all—Alex H. Kerr, Beverly Hills, Calif.	544 x 550
All gauge—Francis Ellis, Jacksonville.	250 x 250
Service Individual—T/Sgt. C. B. Jones, Hensley Field, Dallas.	249 x 250
Senior—Bert J. Barr, Houston.	247 x 250
Colleague—Mickey Michaelis, U. of Texas.	248 x 250
All gauge 2-man team—Francis Ellis—Emmett Lee, Jacksonville.	499 x 500
Parent-and-child—Charles H. Poulton—Jerry W. Myer, San Antonio.	491 x 500
Husband-and-wife—C. Earl and Dorothy Stoner, Culver City, Calif.	491 x 500
All gauge 5-man team—Texas (Charles H. Poulton, Joe H. Frost, Jr., and Ed C. Scherer, San Antonio; Grant Iseng, Houston, Bennie Bickers, Dallas).	1240 x 1250
Service 5-man team—SAC, Carswell Field No. 1, Fort Worth (S/Sgt. Glen W. Van Buren, Sgt. Charles A. Barr, Sgt. Scott R. Babcock, S/Sgt. Milton T. Hewitt, Col. C. T. Edwinson).	1224 x 1250
20 gauge—Alex H. Kerr.	100 x 100
20 gauge 2-man team—S/Sgt. Glen W. Van Buren—Sgt. Scott R. Babcock.	196 x 200
Small gauge—Grant Iseng.	100 x 100
Small gauge 2-man team—Grant Iseng—Bennie Bickers.	197 x 200
Sub-small gauge—Grant Iseng.	96 x 100
Sub-small 2-man team—Alex H. Kerr—C. Earl Stoner.	192 x 200
Champion of champions—Grant Iseng.	100 x 100
Western Open—Nancy Burrus, Dallas.	100 x 100
Eastern Open—Ed C. Scherer.	100 x 100
East-West team championship—West.	1999 x 2000

Women

High-over-all—Mrs. R. H. (Ann) Martin, San Antonio.	530 x 550
All gauge—Mrs. R. H. Martin.	248 x 250
20 gauge—Mrs. R. H. Martin.	99 x 100
Small gauge—Mrs. R. H. Martin.	97 x 100
Sub-small gauge—Mrs. R. H. Martin.	88 x 100

Junior

High-over-all—Dickie Greco, Tampa, Fla.	525 x 550
All gauge—Robbie Joubert, Houston.	244 x 250
20 gauge—B. H. Hilburn, Jr., Dallas.	99 x 100
Small gauge—David C. White, Tulsa.	99 x 100
Sub-small gauge—Dickie Greco.	91 x 100
Women's all gauge—Carole Simmons, Kansas City, Kans.	74 x 100
Sub-junior all gauge—Jack Rogers, Palestine, Texas.	99 x 100

Industry

High-over-all—D. Lee Braun, Dallas.	541 x 550
All gauge—George F. Heaney, Indianapolis.	249 x 250
20 gauge—D. Lee Braun.	100 x 100
Small gauge—George F. Heaney.	100 x 100
Sub-small gauge—D. Lee Braun.	95 x 100

World records were made by Ellis and Lee (all gauge 2-man team), Texas (all gauge 5-man team), West (East-West team championship), White (junior small gauge), Rogers (sub-junior all gauge). World records were equalled by Kerr (high-over-all and 20 gauge), Ellis (all gauge), Iseng (small gauge and champion of champions), Miss Burrus (Western Open), Scherer (Eastern Open), Mrs. Martin (women's high-over-all), Braun (industry 20 gauge), Heaney (industry small gauge).

Walsh Shatters Weight-Lifting Mark

Jack Walsh, 22, of Trenton, N. J., bettered a world weight-lifting record at Trenton on July 7, 1950, when he raised 4,235 pounds on his back. The load included 76 iron test blocks of 50 pounds each and a 435-pound special platform and was checked officially by Frank Black, New Jersey Supervisor of Weights and Measures. The previous mark was set in 1905 at Toledo by Louis Cyr, 390-pound French-Canadian, who lifted 4,140 pounds. Walsh weighs 180 pounds.

TRAPSHOOTING

Grand American Winners, 1950

Source: Ray Loring, Amateur Trapshooting Association.
(At Vandalia, Ohio, Aug. 18 to 26)

Grand American Handicap—Oscar Scheske, Belleville, Ill. (19 yd.)	100 x 100
Women's Grand American Handicap—Anna Linn, Maupin, Oreg. (19 yd.)	98 x 100
Preliminary handicap—Alvin Hextall, Newark, Ill. (19 yd.)	100 x 100
Women's preliminary handicap—Joan Plueger, Miami, Fla. (22 yd.)	96 x 100
Professional preliminary handicap—D. Lee Braun, Dallas (25 yd.)	96 x 100
North American clay target championship—Joe Devers, Dayton, Ohio.	200 x 200
Women's North American clay target championship—Mrs. Ruth Ray, Eugene, Oreg.	199 x 200
Professional North American clay target championship—Thomas R. Frye, Findlay, Ohio.	199 x 200
Champion of champions (men)—Joan Plueger.	100 x 100
Champion of champions (women)—Blanche Bowers, Benkelman, Nebr.	100 x 100
Junior champion of champions—Ronald Gaude, Natchez, Miss.	100 x 100
National doubles championship—Julius Petty, Stuttgart, Ark.	97 x 100
Vandalia Open Handicap—Russel Stine, Secor, Ill.	100 x 100
Junior clay target championship—Robert O'Donnell, Belle Fourche, S. D.	100 x 100
Sub-junior championship—William Brown, Jr., Paola, Kans.	96 x 100
Veterans' championship—H. D. Gibbs, Union City, Tenn.	98 x 100
Veterans' championship (women)—Mrs. Roy Meadows, Grimes, Iowa.	97 x 100
Husband-and-wife—Mr. and Mrs. Clyde King, Jr., Atlanta, Ga.	194 x 200
Father-and-son—Vern and Dwayne Brownlee, Wichita, Kans.	196 x 200
Brother-and-brother—Paul Petty, England, Ark. (98 x 100) and Julius Petty (99 x 100).	197 x 200
State team race—Indiana (Nathan Barrett, E. L. Hawkins, H. L. Cheek, Harold Cannon, W. A. Smith).	987 x 1000
All-around champion—Julius Petty.	392 x 400
High-over-all champion—Ned Lilly, Stanton, Mich.	977 x 1000
Professional high-over-all champion—Rudy Etchen, Bellevue, Wash.	980 x 1000
Kin's Trophy (women)—Joan Pfunder, Class AA—Victor A. Reinders, Waukesha, Wis.	950 x 1000
Class A—M. R. Junkins, Montrose, Iowa	200 x 200
Class B—Don Graham, Winona, Minn.	199 x 200
Class C—Robert Tift, Delavan, Wis.	199 x 200
Class D—Don Hinton, Marion, Ohio.	196 x 200
Professional class—Rudy Etchen.	199 x 200

Amateur Championships of America at Clay Targets

(At New York A. C., Travers Island, Pelham Manor, N. Y.)

Singles—Dick Shaughnessy, Dedham, Mass. (16 yd.)	197 x 200
Doubles—J. J. McHale, London, Ontario (16 yd.)	92 x 100
Senior—Forest W. McNeil, Houston, Texas (16 yd.)	91 x 100
Women—Mrs. Van N. Marker, Evanston, Ill. (16 yd.)	94 x 100
Junior—Vincent Draddy, Jr., Rye, N. Y. (16 yd.)	93 x 100
Distance handicap—James Thompson, Jr., London, Ontario (20 yd.)	95 x 100

U. S. PRO TENNIS CHAMPIONS

1927-30—Vincent Richards	1940—Don Budge
1931—William T. Tilden, II	1941—Fred Perry
1932—Karel Kozeluh	1942—Don Budge
1933—Vincent Richards	1943—Bruce Barnes
1934—Hans Nusslein	1944—No tournament
1935—William T. Tilden, II	1945—Welby Van Horn
1936—Joe Whalen	1946-47—Bobby Riggs
1937—Karel Kozeluh	1948—Jack Kramer
1938—Fred Perry	1949—Bobby Riggs
1939—Ellsworth Vines	1950—Francisco Segura

CURLING

1949-50 CURLING TROPHY WINNERS

(Skips in parentheses)

Source: Edwin W. Fiske, Jr., secretary, Grand National Curling Club.

- Allen Memorial Medal—Toronto Granite C. C. (Roy Smith).
 Archibald Cup—Mahopac C. C. (T. Halsted).
 Brookline Trophy—Utica C. C. (J. Mortimer).
 Clyde Park Cup—Utica C. C. No. 1 (J. Calder).
 Dewar Cup—Galt C. C. (Robert Carson).
 Douglas Medal—Hamilton Thistle C. C. (A. R. Tarlton).
 Dykes Trophy—Ardsley C. C. (Richard Wells).
 Emmett Medal—New York Caledonian C. C. (W. Cuthbertson).
 Gordon Medal—Utica C. C. (R. E. Read).
 Gordon International Medal—United States beat Canada, 332 to 299.
 Griffith Medal—St. Andrews Golf Club (F. H. Hahn).
 Mitchell Medal—Utica C. C. (R. W. Murray).
 Mohawk Trophy—The Country Club (L. B. Hill).
 Royal Caledonian Trophy—Utica C. C. (R. W. Murray).
 The Country Club Cup—Winchester Country Club (John Joy).
 St. Lawrence Trophy—LaChute (Quebec) C. C. (D. McTavish).
 Stockton Cup—The Country Club (M. Wigen).
 Utica Cup—St. Andrews Golf Club (M. F. Locke).
 District No. 1—Utica C. C. (R. W. Murray).
 District No. 2—St. Andrews Golf Club (P. F. Carl, Jr.).
 District No. 3—Nashua Country Club (Dr. E. J. Belanger).
 Manitoba Bonspiel—Elmwood Club, Winnipeg (Bill McTavish).
 Quebec Bonspiel (Lieutenant-Governor's Trophy)—Quebec C. C. (M. M. Stonehouse).
 1950 Canadian Championship
 FINAL STANDING OF THE CLUBS
- | | W. L. | | W. L. |
|---------------------|-------|----------------------|-------|
| Northern Ontario... | 7 2 | British Columbia... | 5 4 |
| *Manitoba..... | 7 3 | Nova Scotia..... | 4 5 |
| Ontario..... | 7 4 | Saskatchewan..... | 3 6 |
| Alberta..... | 6 4 | New Brunswick.... | 2 7 |
| Quebec..... | 5 4 | Prince Ed. Island... | 1 8 |
- * Won second-place play-off.

ROLLER SKATING

A. R. S. A. CHAMPIONS, 1950

Source: United States Amateur Roller Skating Association

National Artistic

SINGLES

- Men's senior—Leonard Baggeley, Hackensack, N. J.
 Women's senior—June Henrich, Mineola, N. Y.
 Men's junior—John Haddad, Paterson, N. J.
 Women's junior—Marie Grosso, Mt. Vernon, N. Y.
 Men's intermediate—Ronald Holland, Pasadena, Calif.
 Women's intermediate—Ruth Henrich, Mineola, N. Y.
 Men's novice—James Mazel, Plymouth, Mich.
 Women's novice—Nan Massine, Plymouth, Mich.
 Boys' juvenile—Bert Lobbereg, Renton, Wash.
 Girls' juvenile—Carol Ann Rutherford, Seattle

SENIOR PAIRS

- Men—Jake Den Bleyker—John Haddad, Paterson, N. J.
 Women—Mary Louise Leahy—Charlotte Ludwig, Elizabeth, N. J.
 Mixed—Charlotte Ludwig—Jude Cull, Elizabeth, N. J.
 Dance—Gladys Ward—Charles Irwin, Mineola, N. Y.

FOURS

- Senior—Elizabeth, N. J. (Callahan, Leahy, Ludwig, Cull)

National Speed

- Men's senior—William Tourjee, Florham Park, N. J.
 Women's senior—Frances Olsen, Hackensack, N. J.
 Men's intermediate—Edward Swenson, Hackensack, N. J.
 Women's intermediate—Sara Zammataro, Florham Park, N. J.
 Men's junior—Edward Horan, Elizabeth, N. J.
 Women's junior—Marie Grosso, Mount Vernon, N. Y.
 Men's novice—Danny Gresco, Elizabeth, N. J.
 Women's novice—Eileen Laffin, Bayonne, N. J.

RINK OPERATORS CHAMPIONS, 1950

Source: Roller Skating Rink Operators Association of America

National Artistic

SINGLES

- Men's senior—J. W. Norcross, Jr., Greeley, Colo.
 Women's senior—Nancy Lee Parker, Detroit
 Men's intermediate—Jerry Bruland, Ferndale, Wash.
 Women's intermediate—Laurene Anselmy, Pontiac, Mich.
 Men's novice—William G. Cressy, Spokane, Wash.
 Women's novice—Betty Linsky, Seattle
 Boys' junior—William Pate, Jr., Detroit
 Girls' junior—Gertrude Miller, Pontiac, Mich.

PAIRS

- Senior mixed—J. W. Norcross, Jr.—Patricia Ann Carroll, Greeley, Colo.
 Intermediate—George Joseph—Coni Nicholas, New York
 Novice—Charles Dunn—Lillian Bury, Elmhurst, N. Y.
 Junior—Donald Maddalone—Elizabeth Klein, Brooklyn
 Juvenile—John Schepperle—Lorraine DeSabato, Elmhurst, N. Y.

SKATE DANCING

- Senior—Robert and Joan LaBriola, Brooklyn
 Intermediate—John Pritchett—Mrs. B. Niles, Washington, D. C.

FOURS

- Senior—Greeley, Colo. (Norcross, Carroll, Johnson, Laney)

National Speed

- Men's senior—Roland Grina, Portland, Ore.
 Women's senior—Evelyn Olsen, Oakland, Calif.
 Men's intermediate—Joe Juchemich, Portland, Ore.
 Women's intermediate—Alberta Chasteen, Grants Pass, Ore.
 Boys' junior—Charles Tomlinson, Flint, Mich.
 Girls' junior—Carol Sue Massey, Springfield, Mo.

AUTO RACING

THE FIRST automobiles on the road were erratic in action and driving them or even riding in them was considered a trifle risky, hence it became the sporting thing to do. Experimental excursions in crude cars gave rise to rivalry in speed over the rough roads of the Gay Nineties and this eventually led to formal contests, the first of which was a road race from Paris to Moulon in 1894, with 26 cars showing up at the starting line. Formal competition in the United States started with a road race in the Chicago district on Thanksgiving Day, 1895, and the winner, J. F. Duryea, covered the road distance of 54.36 miles at the astonishing average of 7.5 miles per hour!

Around 1900 Paris became the hub of road racing in Europe and each year there were raucous, dusty and dangerous races from Paris to Berlin, to Vienna, to Madrid

and other cities on the Continent. Accidents were so numerous to drivers and spectators that, after a gory group of mishaps in the forepart of the Paris-Madrid race of 1903, the contest was halted at Bordeaux by public authorities and all road racing was brought under control. Other kinds of auto racing were exposed to view. Some contests, including 24-hour races for stock models, were held on circular or oval tracks originally built for horse racing. Finally came the special racing strips for autos, including such famous autodromes as Brooklands in England and the Indianapolis Speedway in the United States.

As a test of engine and chassis under severe conditions and great strain, auto racing rendered invaluable assistance in the development of the motor car of today.

National A. A. A. Champions

1909 Bert Dingley	1922 Jimmy Murphy	1934 Bill Cummings
1910 Ray Harroun	1923 Eddie Hearne	1935 Kelly Petillo
1911 Ralph Mulford	1924 Jimmy Murphy	1936 Mauri Rose
1912 Ralph DePalma	1925 Peter DePaolo	1937 Wilbur Shaw
1913 Earl Cooper	1926 Harry Hartz	1938 Floyd Roberts
1914 Ralph DePalma	1927 Peter DePaolo	1939 Wilbur Shaw
1915 Earl Cooper	1928 Louis Meyer	1940 Rex Mays
1916 Dario Resta	1929 Louis Meyer	1941 Rex Mays
1917 Earl Cooper	1930 Billy Arnold	1946 Ted Horn
1918 Ralph Mulford	1931 Louis Schneider	1947 Ted Horn
1919 Howard Wilcox	1932 Bob Carey	1948 Ted Horn
1920 Gaston Chevrolet	1933 Louis Meyer	1949 John Parsons
1921 Tommy Milton		

History of the One-Mile Speed Mark

The first recorded effort for one mile was made in 1898 by Chasseloup-Laubat, driving a Jentaud, in France. His average was 39.23 m.p.h. This was increased to 65.79 in 1899 by Jenatzky, also in France. The first man to travel better than 100 m.p.h. was Rigolly, in 1904, at 103.56 m.p.h., followed by Baras, with 104.53 in the same year. The first over 200 m.p.h. was Major H. O. D. Segrave, who drove at 203.790 in 1927 at Daytona, Florida.

In 1947 John Cobb of London became the first person to travel more than 400 m.p.h. on land. The Englishman accomplished the

feat on Sept. 16 at Bonneville, Utah, while raising the world mile record to 394.196 m.p.h. and the world kilometer (.62137 of a mile) mark to 393.825 m.p.h.

Cobb's fastest mile was covered in 8.93 seconds and his average speed was 9.1325 seconds. The Briton drove at the rate of 385.645 m.p.h. for the mile and 388.019 for the kilometer on the southward run, then increased his pace to 403.135 m.p.h. and 399.808, respectively, on the northward sprint, the best times ever recorded.

Those who drove 300 m.p.h. or better follow (all at Bonneville):

Date	Driver	Car	Average
Sept. 3, 1935.....	Sir Malcolm Campbell.....	Bluebird Special.....	301.1292
Nov. 19, 1937.....	Capt. G. E. T. Eyston.....	Thunderbolt #1.....	311.42
Aug. 27, 1938.....	Capt. G. E. T. Eyston.....	Thunderbolt #1.....	345.5
Sept. 15, 1938.....	John Cobb.....	Ralton.....	350.2
Sept. 16, 1938.....	Capt. G. E. T. Eyston.....	Thunderbolt #1.....	357.5
Aug. 23, 1939.....	John Cobb.....	Ralton Red Lion.....	368.9
Sept. 16, 1947.....	John Cobb.....	Ralton Mobil Special.....	394.196

Grand Prix Auto Race to Farina

Giuseppe Farina of Italy, driving an Alfa Romeo, won the 1950 Grand Prix of Italy. Farina was clocked in 2:51:14.4 for the 504 kilometers (approximately 313 miles). Another Italian, Alberto Ascari, was second in 2:52:46.8.

The 24-hour automobile race of Le Mans (France) was won by Louis Rosier, a Frenchman, in 1950. Rosier, driving a French Talbot, traveled about 2,163 miles in 23 hours 54 minutes 2.2 seconds. He finished approximately a lap ahead of the runner-up, Pierre Meyrat of France.

Indianapolis Speedway Winners

(500-mile race)

Year	Winner	Car	Second	Third	Time	Average m.p.h.
1911	Harroun	Marmon	Mulford	Bruce-Brown	6:42:08	74.59
1912	Dawson	National	Tetzloff	Hughes	6:21:08	78.70
1913	Goux	Peugeot	Wishart	Merz	6:35:05	76.92
1914	Thomas	Delarge	Duray	Guyot	6:03:45	82.47
1915	DePalma	Mercedes	Resta	Anderson	5:33:55	89.84
1916*	Resta	Peugeot	De Aleve	Mulford	3:34:17	83.26
1917-18	No races					
1919	Wilcox	Peugeot	Hearne	Goux	5:40:42	88.06
1920	Chevrolet	Monroe	Thomas	Milton	5:38:32	88.50
1921	Milton	Frontenac	Sarles	Ford	5:34:44	89.62
1922	Murphy	Murphy Special	Hartz	Hearne	5:17:30	94.48
1923	Milton	H. G. S. Special	Hartz	Murphy	5:29:50	90.95
1924	Corum-Boyer	Dusenber Special	Cooper	Murphy	5:05:23	98.23
1925	DePaolo	Dusenber Special	Lewis	Safer	4:56:39	101.13
1926†	Lockhart	Miller Special	Hartz	Woodbury	4:10:17	95.88
1927	Souders	Duesenberg	Devore	Gulatta	5:07:33	97.54
1928	Meyer	Miller Special	Moore	Souders	5:01:33	99.48
1929	Keech	Simplex Special	Meyer	Gleason	5:07:25	97.58
1930	Arnold	Hartz-Miller	Canton	Schneider	4:58:39	100.488
1931	Schneider	Bowes Special	Frame	Hepburn	5:10:28	96.629
1932	Frame	Miller Special	Wilcox	Bergere	4:48:03.79	104.144
1933	Meyer	Miller Special	Shaw	Moore	4:48:12.75	104.089
1934	Cummings	Miller Special	Rose	Moore	4:46:05.20	104.863
1935	Petillo	Gilmore Special	Shaw	Cummings	4:42:22.71	106.240
1936	Meyer	Ring Free Special	Horn	Mackenzie	4:35:03.39	109.069
1937	Shaw	Shaw-Gilmore Special	Hepburn	Horn	4:24:07.80	113.580
1938	Roberts	Burd Piston Reg. Special	Shaw	Miller	4:15:58.40	117.200
1939	Shaw	Boyle Special	Snyder	Bergere	4:20:47.39	115.035
1940	Shaw	Boyle Special	Mays	Rose	4:22:31.17	114.277
1941	Rose-Davis†	Noc-Out Hose Clamp Special	Mays	Horn	4:20:36.24	115.117
1942-45	No races					
1946	Robson	Thorne Eng. Special	Jackson	Horn	4:21:16.71	114.820
1947	Rose	Blue Crown Special	Holland	Horn	4:17:52.17	116.338
1948	Rose	Blue Crown Special	Holland	Nalon	4:10:23.38	119.813
1949	Holland	Blue Crown Special	Parsons	Connor	4:07:15.97	121.327
1950§	Parsons	Wynn's Fiction Proof Spl.	Holland	Rose	2:46:55.97	124.002

* 300 miles. † Race ended at 400 miles owing to heavy rain. ‡ Davis drove 180 miles, Rose 320. § 1950 race ended at 345 miles because of rain.

WINNERS OF NATIONAL CHAMPIONSHIP RACES IN 1950

Date	Place	Distance, miles	Winner and home city	Automobile	Time
May 30	Indianapolis	345	John Parsons, Van Nuys, Calif.	Wynn's Frict. Proof Spl.	2:46:55.97
June 11	Milwaukee	100	Tony Bettenhausen, Tinley Park, Ill.	Belanger Spl.	1:10:33.93
June 25	Langhorne, Pa.	100	Jack McGrath, Alhambra, Calif.	Hinkle Spl.	1:07:47.07
Aug. 19	Springfield, Ill.	100	Paul Russo, Hammond, Ind.	Russo-Nichels Spl.	1:05:44.45
Aug. 27	Milwaukee	200	Walt Faulkner, San Diego, Calif.	Grant Piston Ring Spl.	2:17:26.05
Sept. 4	Pikes Peak, N. Y.	12	Al Rogers, Colorado Springs, Colo.	Coniff Spl.	15:39.0
Sept. 9	Syracuse, N. Y.	100	Jack McGrath, Alhambra, Calif.	Hinkle Spl.	1:08:41.83
Sept. 10	Detroit, Mich.	100	Henry Banks, Compton, Calif.	Blue Cr. Sp. Plug Spl.	1:12:25.4
Oct. 1	Springfield, Ill.	100	Tony Bettenhausen, Tinley Park, Ill.	Belanger Spl.	1:12:25.4
Oct. 15	Sacramento, Calif.	100	Duke Dinsmore, Dayton, Ohio	Brown Motor Co. Spl.	1:12:25.4

McGriff Stock Car Victor

Hershel McGriff of Portland, Ore., captured the six-day 2,178-mile Mexican race for stock cars last May by the narrow margin of 1 minute 19 seconds. McGriff, driving a 1950 Oldsmobile, crossed the finish line on the Guatemalan frontier in 27 hours 34 minutes 5 seconds and his victory was worth \$17,381. The race started at Juarez on the U. S. border. Tom Deal of El Paso, Texas, drove his Cadillac from border to border in 27:35:41 or second money of \$11,570.

Juan Manuel Fangio of Argentina won the 72-kilometer Grand Prix des Nations auto race at Geneva, Switzerland, last year.

Lloyd Dog Cruft's Victor

The biggest dog show in the world, Cruft's in London, was won in 1950 for the second time in three years by an English cocker spaniel, H. S. Lloyd's Tracey Witch of Ware, the victor in 1948. There were 12,317 entries made by 5,720 dogs in 1,029 classes in last year's exhibition.

Rich Dog Race to Real Huntsman

Real Huntsman, owned by Gene Randle of Wichita, Kan., captured the \$25,000 American Greyhound Derby at the Taunton (Mass.) dog track last August. The Randle racer was timed in 38 4/5 seconds for the 675 yards.

YACHTING

JASON sailed in search of the Golden Fleece. Cleopatra (according to Shakespeare) had a royal barge with purple sails. Columbus had three sailing ships when he crossed the Atlantic westward in 1492. But who the first sailor was and where he launched his primitive craft nobody ever will know. The word "yacht" is of Dutch origin and the first "yacht race" of record in the English language was a sailing contest from Greenwich to Gravesend and return in 1662 between a Dutch yacht and an English yacht designed and, at some part of the race, sailed by Charles II of England. The royal yacht won the contest.

The first yacht club was organized at Cork, Ireland, in 1720 under the name of the Cork Harbour Water Club, later changed to the Royal Cork Yacht Club. The Royal Yacht Squadron was organized

at Cowes in 1812 and the name changed to the Royal Yacht Club in 1820. The New York Yacht Club was organized aboard the Stevens schooner "Gimcrack" on July 30, 1844, and a clubhouse erected at Elysian Fields, Hoboken, N. J., the following year.

From that time until the Civil War races were held over courses starting from the water off the yacht club promontory. One course was to the Sandy Hook Lightship and return.

In 1850 the celebrated "America" was built by a group of New York yachtsmen and sent abroad to compete at Cowes. In a race around the Isle of Wight, with a special cup as a prize, the "America" defeated fourteen English boats and brought back the trophy that has been raced for as "the America's Cup" in many international yacht races since that time.

AMERICA'S CUP RECORD

(Figures in parentheses indicate number of races won)

Dates	Winner, Owner, Country	Looser, Owner, Country
Aug. 22, 1851.....	AMERICA (1), J. C. Stevens, U. S.....	*AURORA, J. Le Marchant, England
Aug. 8, 1870.....	MAGIC (1), F. Osgood, U. S.....	CAMBRIA, J. Ashbury, England
Oct. 16-23, 1871.....	COLUMBIA (2), F. Osgood, U. S.....	LIVONIA (1), J. Ashbury, England
	SAPPHO (2), Wm. P. Douglass, U. S.	
Aug. 11-12, 1876.....	MADEIRA (2), J. Dickerson, U. S.....	COUNTESS OF DUFFERIN, C. Gifford, Canada
Nov. 9-10, 1881.....	MISCHIEF (2), J. Busk, U. S.....	ATALANTA, A. Cuthbert, Canada
Sept. 14-16, 1885.....	PURITAN (2), J. Forbes, U. S.....	GENESTA, Sir R. Sutton, England
Sept. 9-11, 1886.....	MAYFLOWER (2), Gen. J. Paine, U. S.....	GALATEA, Lt. Henn, R.N., England
Sept. 17-30, 1887.....	VOLUNTEER (2), Gen. J. Paine, U. S.....	THISTLE, J. Bell, England
Oct. 7-13, 1893.....	VIGILANT (3), Messrs. Iselin-Morgan, U. S.....	VALKYRIE, Lord Dunraven, England
Sept. 7-12, 1895.....	DEFENDER (3), Messrs. Iselin-Morgan, U. S.....	VALKYRIE II, Lord Dunraven, England
Oct. 16-20, 1899.....	COLUMBIA (3), Messrs. Iselin-Morgan, U. S.....	SHAMROCK I, Sir Thomas Lipton, England
Sept. 28-Oct. 4, 1901.....	COLUMBIA (3), J. P. Morgan, U. S.....	SHAMROCK II, Sir Thomas Lipton, England
Aug. 22-Sept. 3, 1903.....	RELIANCE (3), Iselin, et al, U. S.....	SHAMROCK III, Sir Thomas Lipton, England
July 15-27, 1920.....	RESOLUTE (3), R. Emmons, et al, U. S.....	SHAMROCK IV (2), Sir Thomas Lipton, England
Sept. 13-17, 1930.....	ENTERPRISE (4), Aldrich-Vanderbilt, U. S.....	SHAMROCK V, Sir Thomas Lipton, England
Sept. 17-25, 1934.....	RAINBOW (4), H. S. Vanderbilt, U. S.....	ENDEAVOUR (2), T. O. M. Sopwith, England
July 31-Aug. 5, 1937.....	RANGER (4), H. S. Vanderbilt, U. S.....	ENDEAVOUR II, T. O. M. Sopwith, England

* Finished second. First race held off Cowes, Isle of Wight, England; from 1870 to 1920 races held off New York Bay; from 1930 to 1937 races held off Newport, R. I.

YACHTING CHAMPIONS IN 1950

Source: John Rendel, *The New York Times*

Bacardi Cup (Star Class)—**SHILLALAH**, E. W. Etchells, New York
 Cuba Cup (Star Class)—**SHILLALAH**
 World Star Class—**SEA ROBIN**, Robert Lippincott, Riverton, N. J.
 Sears Cup (national junior championship)—**Pleon Y. C.**, Marblehead, Mass. (Stephen Smithwick, skipper)
 Mrs. Charles Francis Adams Cup (women's national championship)—**American Y. C.**, Rye, N. Y. (Mrs. Allegra Knapp Mertz, skipper)
 National Penguin—**Runyon Colle**, Mantoloking, N. J.
 International Comet—**Howard Lippincott**, Riverton, N. J.
 International Lightning—**H. R. Krauss**, Toledo, Ohio
 Bantam—**Bernard Hiller**, Lakewood, Ohio
 Thistle—**Frank Marquardt**, Alexandria, Va.

Moth—**Gene Willey**, Elizabeth City, N. C.
 National Snipe—**Clark King**, Newport Harbor, Calif.

King's Cup (N.Y.Y.C. cruise)—**BOLERO** (yaw), John Nicholas Brown, New York

DISTANCE RACE WINNERS

Newport to Bermuda—**ARGYLL** (yaw), W. T. Moore, Oyster Bay, N. Y.
 Port Huron-to-Mackinac Island—**ESCAPADE** (yaw), Wendell W. Anderson, Detroit
 Chicago-to-Mackinac Island—**FLEETWOOD** (ketch), Nicholas J. Gelb, Chicago
 St. Petersburg-to-Havana—**WINDIGO** (yaw), W. S. Gubelmann, New York
 Miami-to-Nassau—**BLITZEN** (cutter), Ernest Crates and Murray Knapp, Detroit
 Bermuda-to-Plymouth, England—**COHOE** (sloop), K. Adlard Coles, England

WORLD STAR CLASS CHAMPIONS

Source: International Star Class Yacht Racing Association.

Year	Winner	Skipper	Skipper's fleet	Where held
1922	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1923	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1924	LITTLE BEAR	J. R. Robinson	Western L. I. Sound	Western L. I. Sound
1925	ACE	Adrian Iselin II	Western L. I. Sound	Western L. I. Sound
1926	RHODY	B. W. Comstock	Western L. I. Sound	Western L. I. Sound
1927	TEMPE III	Walton Hubbard	Narragansett Bay	Western L. I. Sound
1928	SPARKLER II	P. E. Edrington	Newport Harbor	Warwick, R. I.
1929	EEL	J. G. Johnson	New Orleans Gulf	Newport Beach, Calif.
1930	PEGGY WEE	A. Knapp	Chesapeake Bay	New Orleans, La.
1931	COLLEEN	W. J. McHugh	Western L. I. Sound	Gibson Island, Md.
1932	MIST	Edward Fink	Central L. I. Sound	Western L. I. Sound
1933	THREE STAR TWO	Glenn Waterhouse	Los Angeles Harbor	Southport, Conn.
1934	BY-C	H. F. Beardslee	E. San Francisco Bay	Los Angeles, Calif.
1935	BY-C	H. F. Beardslee	Newport Harbor	San Francisco, Calif.
1936	ACE	Adrian Iselin II	Newport Harbor	Newport Beach, Calif.
1937	LECKY	Milton Wegeforth	Western L. I. Sound	Rochester, N. Y.
1938	PIMM	Walter von Hutschler	San Diego Bay	Western L. I. Sound
1939	PIMM	Walter von Hutschler	Hamburg	San Diego, Calif.
1940	RAMBUNCTIOUS	Jim Cowie	Hamburg	Kiel, Germany
1941	WENCH	George Fleitz	Los Angeles Harbor	San Diego, Calif.
1942	*	Harry G. Nye, Jr.	Los Angeles Harbor	Los Angeles, Calif.
1943	*	Arthur M. Deacon	Southern Lake Mich.	Chicago, Ill.
1944	*	Gerald Driscoll	Western L. I. Sound	Bay Shore, N. Y.
1945	*	Malin Burnham	San Diego Bay	Chicago, Ill.
1946	WENCH II	George Fleitz	San Diego Bay	Stamford, Conn.
1947	GEM II	Durward Knowles	Los Angeles Harbor	Havana
1948	TWIN STAR	Lockwood M. Pirie	Nassau, Bahamas	Los Angeles, Calif.
1949	GALE	Harry G. Nye, Jr.	Wilmette Harbor, Ill.	Lisbon, Portugal
1950	SEA ROBIN	Robert Lippincott	Southern Lake Mich.	Chicago, Ill.
			West Jersey	Chicago, Ill.

* Indicates skipper's series in which the contestants drew for local boats each day and brought their own sails.

CHESS

Source: American Chess Bulletin of New York.

World Champions

1851-58	Adolph Anderssen, Breslau, Germany
1858-62	Paul Morphy, New Orleans, La.
1862-65	Adolf Anderssen, Breslau, Germany
1866-94	William Steinitz, Vienna, Austria
1894-1921	Emanuel Lasker, Berlin, Germany
1921-27	Jose R. Capablanca, Havana, Cuba
1927-35	Alexander A. Alekhine, Moscow, Russia
1935-37	Dr. Max Euwe, Amsterdam, the Netherlands
1937-46	Alexander A. Alekhine, Moscow, Russia*
1948-	Mikhail Botvinnik, Leningrad, Russia

* Alekhine, a French citizen, died on March 23, 1946, leaving the world championship vacant.

Chess Title to Yugoslavia

The team championship of the International Chess Federation, held for the first time since 1939, was taken in 1950 by a Yugoslav quintet with a score of 45½-14½. Representing the victors in the event at Dubrovnik, Yugoslavia, were Dr. Svetozar Gligoric, Dr. Petar Trifunovic, Vasa Pirc, van Rabar and Dr. Milan Vidmar.

Bronstein Gains Title Chance

David Bronstein of the U.S.S.R. earned the right to meet Mikhail Botvinnik, the champion, for the world chess title in 1951 by winning last year's championship. challengers' journey at Budapest, Hungary.

United States Champions

1852-62	Paul Morphy, New Orleans, La.
1871-87	George H. Mackenzie, New York
1887-92	Max Judd, St. Louis, Mo.
1892-94	Simon Lipschuetz, New York
1894	Jackson W. Showalter, Georgetown, Ky.
1894	Albert B. Hodges, Staten Island, N. Y.*
1894-97	Jackson W. Showalter, Georgetown, Ky.
1897-1906	Harry Nelson Pillsbury, Boston, Mass.
1906-09	Jackson W. Showalter, Georgetown, Ky.
1909-36	Frank J. Marshall, New York
1936-44	Samuel Reshevsky, New York†
1944-46	Arnold S. Denker, New York
1946	Samuel Reshevsky, Boston
1948	Herman Steiner, Los Angeles

* Retired after winning return match with Showalter.
† In 1942, Isaac I. Kashdan of New York was co-champion for a while because of a tie with Reshevsky in that year's tournament. Reshevsky won the play-off.

OTHER CHESS CHAMPIONS, 1950

WORLD

Women—Mrs. Ludmilla Rudenko, Moscow, U.S.S.R.

UNITED STATES

Open—Arthur B. Bisguier, New York

Speed—Larry Evans, New York

Junior—James Cross, Glendale, Calif.

Women—N. May Karff, Boston, and Mrs. Gisela K. Gresser, New York (co-holders)

The first official fencing academy was established in London during the reign of Henry the Fourth (1399-1413).

MOTORBOATING

SINCE the source of power—the internal combustion engine—is the same in the motorboat as it is in the automobile, the history of motorboat racing parallels that of auto racing. There was a sporting risk in driving the early power boats. As soon as they began to show a degree of dependability, there came the informal rivalries of the rivers and lakes. These led to the formal contests of speed and endurance

over marked courses under the control of the American Power Boat Association. The races were severe tests of all parts of power boats and what was learned in the annual Gold Cup competition, which started in 1904, caused a great improvement in the designing of engines and hulls. The development of the outboard motor opened up another branch of power boat competition of wide popularity.

Motorboating Statistics

Source: American Power Boat Association and *Motor Boating Magazine*.

GOLD CUP WINNERS

Beginning with 1922 the race for the American Power Boat Association Gold Cup was open only to displacement boats of over 25 feet in length and powered with motors of not more than 625 inches piston displacement.

In 1946 the rules were liberalized to encourage the entry of smaller, less expensive craft. Boats now are required to be between 10 and 40 feet in length, with horsepower unlimited.

Year	Sponsor	Winner and owner	Time of best heat	Best heat speed m.p.h.
1904	Columbia Yacht Club	STANDARD, C. C. Riotte	1:33:30	23.6
1904	Columbia Y. C.	VINGT-ET-UN II, W. Sharpe Kilmer	1:27:03	25.3
1905	Chippewa Bay Y. C.	CHIP, J. Wainwright	1:52:38	15.9
1906	Chippewa Bay Y. C.	CHIP II, J. Wainwright	1:27:01	20.6
1907	Chippewa Bay Y. C.	CHIP II, J. Wainwright	1:26:43	20.8
1908	Chippewa Bay Y. C.	DIXIE II, E. J. Schroeder	0:58:13	30.9
1909	Thousand Islands Y. C.	DIXIE II, E. J. Schroeder	0:58:25	32.9
1910	Thousand Islands Y. C.	DIXIE III, F. K. Burnham	0:57:14	33.6
1911	Frontenac Y. C.	MIT II, J. H. Hayden	0:53:31	36.1
1912	Thousand Islands Y. C.	P. D. Q. II, Alfred G. Miles	0:44:59	44.5
1913	Thousand Islands Y. C.	ANKLE DEEP, C. S. Mankowski	0:41:03	50.49
1914	Lake George Reg. Assn.	BABY SPEED DEMON II, Paula Blackton	0:42:41	48.5
1915	L. I. Sound P. B. A.	MISS DETROIT, Miss Detroit P. B. A.	0:41:21	49.7
1916	Miss Detroit P. B. A.	MISS MINNEAPOLIS, Miss Minneapolis B. A.	0:52:12	36.8
1917	Miss Minneapolis B. A.	MISS DETROIT II, Garfield A. Wood	0:36:47	56.5
1918	Detroit Y. C.	MISS DETROIT III, Detroit Yachtsmen	0:34:36	52.1
1919	Detroit Y. C.	MISS DETROIT III, Garfield A. Wood	0:32:37	56.3
1920	Detroit Y. C.	MISS AMERICA, Garfield A. Wood	0:25:44	70.0
1921	Detroit Y. C.	MISS AMERICA, Garfield A. Wood	0:32:52	56.5
1922	Detroit Y. C.	PACKARD-CHRISCAFT, J. G. Vincent	0:44:17.77	40.6
1923	Detroit Y. C.	PACKARD-CHRISCAFT, J. G. Vincent	0:40:30	44.4
1924	Detroit Y. C.	BABY BOOTLEGGER, Caleb Bragg	0:33:48.61	46.4
1925	Columbia Y. C.	BABY BOOTLEGGER, Caleb Bragg	0:37:11	48.4
1926	Columbia Y. C.	GREENWICH FOLLY, G. H. Townsend	0:36:34	49.22
1927	Indian Harbor Y. C.	GREENWICH FOLLY, G. H. Townsend	0:35:18	50.99
1929	Red Bank & Columbia Y. C.	IMP, R. F. Hoyt	0:35:39.04	50.489
1930	Red Bank & Columbia Y. C.	HOTSY TOTSY, V. Kliersrath	0:32:07	56.05
1931	Montauk Y. C.	HOTSY TOTSY, V. Kliersrath-R. Hoyt	0:32:46.47	54.92
1932	Montauk Y. C.	DELPHINE IV, Horace E. Dodge	0:30:24	59.21
1933	Detroit Y. C.	EL LAGARTO, G. Reis	0:29:34.4	60.866
1934	Lake George Club	EL LAGARTO, G. Reis	0:31:00.4	58.06
1935	Lake George Club	EL LAGARTO, G. Reis	0:31:16	57.582
1936	Lake George Club	IMPISH, Horace E. Dodge	0:38:13	47.120
1937	Detroit Y. C.	NOTRE DAME, Herbert Mendelson	0:26:13.32	68.645
1938	Detroit Y. C.	ALAGI, Theo Rossi	0:27:14.38	66.080
1939	Miss Detroit P. B. A.	MY SIN, Z. G. Simmons, Jr.	0:26:50.73	67.05
1940	Indian Harbor Y. C.	HOTSY TOTSY III, Sidney Allen	0:36:04.3	51.316
1941	Red Bank Reg. Assn.	MY SIN, Z. G. Simmons, Jr.*	—	52.509
1946	Detroit, Y. C.	TEMPO VI, Guy Lombardo	0:25:23.74	70.878
1947	South Shore Y. C.	MISS PEPS V, Walter, Roy and Russell Dossin	0:31:33.6	57.02
1948	Detroit Y. C.	MISS GREAT LAKES, Albin Fallon	0:31:19.82†	57.452†
1949	Detroit River R. A.	MY SWEETIE, Bill Cantrell	0:22:53.26	78.645
1950	Detroit River R. A.	SLO-MO-SHUN IV, Stanley S. Sayres	0:22:15.03	80.897

* Only contestant. † Made by SUCH CRUST.

RECORDS FOR ONE-MILE STRAIGHTAWAY

Source: Clarence E. Lovejoy, Boating Editor, *The New York Times*, and Educational Consultant, 1475 Broadway, New York 18, N. Y.

Class	Speed m.p.h.	Date	Place	Boat and driver
Unlimited hydroplane (world).....	160.323	6/26/50	Seattle, Wash.....	SLO-MO-SHUN IV, Stanley Sayres
Unlimited hydroplane (Canada).....	138.645	10/ 2/49	Pictou, Ontario.....	MISS CANADA IV, Harold Wilson
7 litre.....	98.875	9/25/50	New Martinsville, W. Va.....	TOMYANN, Joe Taggart
225 cu. in. hydroplane (Div. I).....	99.820	10/11/49	Salton Sea, Calif.....	BELLIGERO II, Paul Sawyer, Jr.
225 cu. in. hydroplane (Div. II).....	94.240	10/11/49	Salton Sea, Calif.....	GREEN HORNET, L. O. Turner
151 cu. in. hydroplane.....	81.264	9/21/47	Washington, D. C.....	UNCLE SAM I, Edison Hedges
135 cu. in. hydroplane.....	92.130	5/21/49	San Diego, Calif.....	SKALAWAGGS, Roy Skaggs
91 cu. in. hydroplane.....	64.685	10/25/41	Salton Sea, Calif.....	TOPS' PUP, Jack Cooper
48 cu. in. hydroplane.....	57.995	10/10/49	Salton Sea, Calif.....	BALLERINA II, W. Carroll
48 cu. in. runabout.....	53.258	9/25/50	New Martinsville, W. Va.....	MICKEY MOUSE, Mrs. Ruby Scull
Pacific One-Design.....	59.90	5/21/49	San Diego, Calif.....	CHERUB II, Dr. L. J. Novotny
Cracker Box runabout.....	63.562	10/10/49	Salton Sea, Calif.....	LITTLE STINKER, Glen Miller
Jersey Speed Skiff.....	45.432	9/ 9/50	Ocean City, N. J.....	CHANTICLEER, H. F. Disbrow
Class X out. hydro. (world).....	79.04	5/20/39	Paris, France.....	Jean Dupuy
Class X out. hydro (U. S.).....	78.44	11/ 1/39	Worcester, Mass.....	Clinton R. Ferguson
Class A out. hydro.....	50.281	11/19/45	Salton Sea, Calif.....	Jack Henckes
Class B out. hydro.....	57.234	10/29/40	Salton Sea, Calif.....	Thomas Cooper
Class C out. hydro.....	63.549	11/19/45	Salton Sea, Calif.....	Tom Newton
Class C serv. out. hydro.....	50.143	10/14/47	Salton Sea, Calif.....	MY GAL, Rocky Stone
Class C racing out. run.....	56.888	10/10/49	Salton Sea, Calif.....	MISS SANTA BARBARA, Tom Newton
Class C serv. out. run.....	51.613	5/21/49	San Diego, Calif.....	James Mullen
Class F out. hydro.....	66.234	6/ 8/40	Port Mercer, N. J.....	MUSCAT KID V, J. Kovacevich
Class F racing out. run.....	57.935	9/16/40	Worcester, Mass.....	Mrs. Eleanor Shakeshaft
Class M out. hydro.....	42.303	3/21/49	Lake Alfred, Fla.....	

RECORDS IN COMPETITION

Class	Dist.	Speed m.p.h.	Date	Place	Boat and driver
Unlimited.....	10 (n)	107.394	9/ 4/50	Detroit, Mich.....	MISS PEPSI, Chuck Thompson
Gold Cup lap.....	3	86.200	7/22/50	Detroit, Mich.....	MY SWEETIE, W. J. Cantrell
Gold Cup heat.....	30	88.92	7/22/50	Detroit, Mich.....	SLO-MO-SHUN IV, Ted Jones
Gold Cup race.....	90	78.215	7/22/50	Detroit, Mich.....	SLO-MO-SHUN IV, Ted Jones
Harmsworth lap.....	5 (n)	102.676	9/ 2/50	Detroit, Mich.....	SLO-MO-SHUN IV, Lou Fageol
Harmsworth heat.....	40 (n)	100.68	9/ 2/50	Detroit, Mich.....	SLO-MO-SHUN IV, Lou Fageol
Harmsworth race.....	80 (n)	95.623	9/ 2/50	Detroit, Mich.....	SLO-MO-SHUN IV, Lou Fageol
President's Cup heat.....	15	88.725	9/17/50	Washington, D. C.	MISS PEPSI, Chuck Thompson
National Sweepstakes heat.....	10	87.464	8/14/49	Red Bank, N. J.....	MY SWEETIE, W. J. Cantrell
Silver Cup heat.....	10 (n)	107.394	9/ 4/50	Detroit, Mich.....	MISS PEPSI, Chuck Thompson
Steel Cup heat.....	15	67.500	5/20/50	Pittsburgh, Pa.....	SUCH CRUST II, Dan Arena
Harwood Trophy.....	30	64.400	9/11/49	New York, N. Y.....	ETTA, George Sarant
Edinburn Trophy.....	9	68.123	9/ 6/48	Detroit, Mich.....	Z-Z-ZIP, Sid Street
225 Class (Div. I).....	5	81.782	8/27/50	Cincinnati, Ohio.....	Z-Z-ZIP, Sid Street
225 Class (Div. II).....	5	75.188	8/ 7/50	Pictou, Ontario.....	ALTER EGO, Paul Sawyer, Jr.
48 cu. in. hydroplane.....	5	55.659	10/ 8/49	Salton Sea, Calif.....	BALLERINA II, R. H. Scott
48 cu. in. runabout.....	5	47.319	8/ 5/50	Red Bank, N. J.....	YANKEE BOY, R. J. McAllister
91 cu. in. hydroplane.....	5	53.989	7/24/49	Bush River, Md.....	RED WITCH, Jack Van Deman
135 cu. in. hydroplane.....	5	75.137	10/16/48	Salton Sea, Calif.....	MICKEY CHEVRON, Roy Skaggs
151 cu. in. hydroplane.....	5	59.193	9/18/46	Red Bank, N. J.....	UNCLE SAM I, Edison Hedges
Pacific One-Design.....	5	53.763	8/21/49	Cambridge, Md.....	CHERUB II, Dr. L. J. Novotny
Cracker Box Inb. runabout.....	5	60.484	10/ 8/49	Salton Sea, Calif.....	DRAGON B-HIND, R. Phillips, Jr.
Jersey Speed Skiff.....	5	44.510	8/ 5/50	Red Bank, N. J.....	FALCON, Ray Morris

(n) — Nautical miles.

HARMSWORTH TROPHY WINNERS

Year	Boat and Country	Speed M. P. H.
1903	—NAPIER I, France.....	26.63
1904	—TREFLE-A-QUATRE, England.....	19.53
1905	—NAPIER II, England.....	26.03
1906	—YARROW-NAPIER, England.....	15.48
1907	—DIXIE I, United States.....	31.78
1908	—DIXIE II, United States.....	31.347
1910	—DIXIE II, United States.....	36.04
1911	—DIXIE IV, England.....	43.18
1912	—MAPLE LEAF IV, England.....	57.45
1920	—MISS AMERICA I, United States.....	61.51
1921	—MISS AMERICA II, United States.....	59.75
1926	—MISS AMERICA V, United States.....	61.118
1928	—MISS AMERICA VII, United States.....	59.325
1929	—MISS AMERICA VIII, United States.....	75.287
1930	—MISS AMERICA IX, United States.....	77.233
1931	—MISS AMERICA VIII, United States.....	85.861
1932	—MISS AMERICA X, United States.....	74.489
1934	—MISS AMERICA X, United States.....	86.939
1949	—SKIP-A-LONG, United States.....	94.285
1950	—SLO-MO-SHUN IV, United States.....	100.680

OTHER CHAMPIONS, 1950

Source: Clarence E. Lovejoy.

National Sweepstakes (Red Bank, N. J.)—TEMPO VI, Guy Lombardo, Freeport, N. Y.
 President's Cup (Washington, D. C.)—MISS PEPSI, Chuck Thompson, Detroit
 Cruisers (Execution Light to Block Island)—CARLAN, Carl Schuster, New York

National Champions

225 Class, Div. I (Cincinnati)—BELLIGERO, Paul Sawyer, Jr., South Harwich, Mass.
 225 Class, Div. II (Cincinnati)—ALTER EGO, Paul Sawyer, Jr.
 7 litre (Buffalo, N. Y.)—ALJO, Joseph Van Blerck, Jr., Freeport, N. Y.
 135 cubic inch class (Oakland, Calif.)—HOLIDAY, Richard Hallett, Downey Calif.
 91 cubic inch class (St. Petersburg, Fla.)—RED WITCH, Jack Van Deman, Wanamassa, N. J.
 48 cubic inch hydroplane (Detroit)—MISS FORT PITT II, Tony Margio, Harrisburg, Pa.
 48 cubic inch runabout (Cambridge, Md.)—YANKEE BOY, Robert McAllister, Ventnor, N. J.
 Pacific One-Design (Oakland, Calif.)—CHERUB II, Dr. L. J. Novotny, Los Angeles
 Cracker Box Class (Oakland, Calif.)—MISS BEVERLY, Bill Connolly, Alameda, Calif.
 Jersey Speed Skiffs (Ocean City, N. J.)—CHANTICLEER, Harold Disbrow, West Long Branch, N. J.

OTHER MOTORBOATING CHAMPIONS, 1950 (cont.)

RACING RUNABOUTS

Class B (Oakland, Calif.)—VINA MAE III, Pete Coffee, Los Banos, Calif.
 Class C (Cambridge, Md.)—T. M. SPECIAL, Ed Thompson, Baltimore
 Class D (Cambridge, Md.)—SAGANA VIII, Franklin Foulke, Essex, Md.
 Class E (Oakland, Calif.)—MISS IRENE, Morgan Keaton, Berkeley, Calif.

SERVICE RUNABOUTS

(All events at Ocean City, N. J.)

Class D—JEZEBEL VIII, Aubrey Thacker, Washington, D. C.
 Class E—CHICRAIG, Joseph H. Stiles, Philadelphia
 Class F—CARY, Joseph Mascari, Floral Park, N. Y.
 Class G—JAY DEE, John J. Dunion, III, Chester, Pa.
 Class I—JENNIE LEE II, Richard R. Lovett, Jr., Longport, N. J.

OUTBOARD HYDROPLANES

(All events at Lake Alfred, Fla.)

Class A—Paul Wearly, Muncie, Ind.
 Class B—Ben Jankowski, Glen Head, N. Y.
 Class C—Byron King, Orlando, Fla.
 Class F—Bud Wiget, Concord, Calif.
 Class M—Mrs. Eleanor Shakeshaft, White Plains, N. Y.
 Class C (racing Runabouts)—J.D. High, Houston, Texas
 Class C (service runabouts)—Bud Wiget
 Class C (service hydroplane)—Bud Wiget

STOCK UTILITY OUTBOARDS

(All events at Dallas, Texas)

Class AU—Al Montouri, Sherman, Texas
 Class BU—Alex Weatherbee, Paris, Texas
 Class CU—Joe Micheline, Chicago
 Class DU—H. L. Flagg, Denison, Texas
 Class EU—Bob Meyer, Kansas City, Kan.
 Class FU—Roy Buile, Fort Worth, Texas
 Class JU—S. H. Winters, Jr., Paris, Texas

MOTORCYCLING

Winners of National Championships in 1950

Source: American Motorcycle Association and *American Motorcycling* magazine.

Road Racing

Event and where held	Winner and home city	Machine	Time
100 Miles (Laconia, N. H.)	Bill Miller, Mountville, Pa.	Harley-Davidson	1:56:22
200 Miles (Datsuna Beach, Fla.)	Billy Mathews, Hamilton, Ont.	Norton	2:15:42.41

Dirt Track Racing

HALF-MILE TRACK

5 Miles (Des Moines, Iowa)	Bill Tuman, Rockford, Ill.	Indian	4:45.64
7 Miles (Shreveport, La.)	Paul Albrecht, Sacramento, Calif.	Harley-Davidson	6:48.4
8 Miles (Reading, Pa.)	Bill Tuman, Rockford, Ill.	Indian	7:39.92
10 Miles (Richmond, Va.)	Joe Weatherly, Norfolk, Va.	Harley-Davidson	9:30.2

MILE TRACK

15 Miles (Milwaukee)	Larry Headrick, San Jose, Calif.	Harley-Davidson	10:50.72
20 Miles (San Mateo, Calif.)	Larry Headrick, San Jose, Calif.	Harley-Davidson	15:17.40
25 Miles (Springfield, Ill.)	Larry Headrick, San Jose, Calif.	Harley-Davidson	*18:01.71

* A. M. A. record.

Speedway Racing

MILE TRACK

100 Miles (Langhorne, Pa.)	Billy Huber, Reading, Pa.	Harley-Davidson	1:09:20.69
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Tourist Trophy Racing

HALF-MILE COURSE—8 MILES

45 cubic inch (Peoria, Ill.)	Roger Soderstrom, Normal, Ill.	Harley-Davidson	8:32.99
80 cubic inch (Peoria, Ill.)	Roger Soderstrom, Normal, Ill.	Harley-Davidson	8:31.55

Endurance Run

600 Miles (Pasadena, Calif.)	Del Kuhn, Long Beach, Calif.	AJS	
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Class A Hill Climb

(All events at Muskegon, Mich.)

45 cubic inch, Class B	Don Farrow, Columbus, Ohio	Harley-Davidson	8.66
74 cubic inch, Class A	Willard Bryan, Groveport, Ohio	Harley-Davidson	7.54
45 cubic inch, Class B qualifying	Paul Allen, Columbus, Ohio	Harley-Davidson	8.59
74 cubic inch, Expert	Willard Bryan, Groveport, Ohio	Harley-Davidson	7.80

Class C Hill Climb

(All events at Eugene, Oreg.)

45 cubic inch, Novice	Howard Alzina, Oakland, Calif.	Indian	267 ft.
45 cubic inch, Amateur	Nick Infantino, Denair, Calif.	Harley-Davidson	10.37
45 cubic inch, Expert	Sam Arena, Palo Alto, Calif.	Harley-Davidson	8.90
80 cubic inch, Novice	Bill Bohlin, San Jose, Calif.	Harley-Davidson	8.95
80 cubic inch, Amateur	Nick Infantino, Denair, Calif.	Harley-Davidson	9.30
80 cubic inch, Expert	Dick Austin, San Jose, Calif.	Harley-Davidson	7.99

Johnston Trophy to Hall

J. Gilbert Hall of New York was the recipient of the William Johnston Trophy in 1950. The award is presented annually by the International Lawn Tennis Club of the U. S. to the player who, on the basis of "character, sportsmanship, manners, spirit and cooperation and contribution to the growth and development of the game, ranks first in the opinion of the selection committee."

Pep-Saddler Draw Record Gate

The world featherweight title fight between Willie Pep and Sandy Saddler at the Yankee Stadium on Sept. 8, 1950, attracted 38,781 spectators who paid \$262,118, the highest gate in ring history below the middleweight class. Saddler, in regaining the championship, was credited with an eighth-round knockout when Pep suffered a dislocated shoulder and the bout was stopped.

HARNESS RACING

OLIVER WENDELL HOLMES, the famous Autocrat of the Breakfast Table, wrote that the running horse was a gambling toy but the trotting horse was useful and, furthermore, "horse-racing is not a republican institution; horse-trotting is." Oliver Wendell Holmes was a born and bred New Englander and New England was the nursery of the harness racing sport in America. Pacers and trotters were matters of local pride and prejudice in Colonial New England and, shortly after the Revolution, the Messenger and Justin Morgan strains produced many winners in harness racing "matches" along the turnpikes of New York, Connecticut, Rhode Island, Massachusetts, Vermont and New Hampshire.

There was English thoroughbred blood in Messenger and Justin Morgan and, many years later, it was blended in Rysdyk's

Hambletonian, foaled in 1849. Hambletonian was not particularly fast under harness but his descendants have had almost a monopoly of prizes, titles and records in the harness racing game. Hambletonian was purchased as a foal with its dam for a total of \$124 by William Rysdyk of Goshen, N. Y. and made a modest fortune for the purchaser.

Trotters and pacers often were raced under saddle in the old days and, in fact, the custom still survives in some places in Europe. Dexter, the great trotter that lowered the mile record from 2:19 $\frac{1}{4}$ to 2:17 $\frac{1}{4}$ in 1867, was said to handle just as well under saddle as when pulling a sulky. But as sulkies were lightened in weight and improved in design, trotting under saddle became less common and finally faded out in this country.

Hambletonian Winners

Goshen, N. Y.

(Three-year-old trotters—1 mile)

Run at Syracuse, N. Y., in 1926 and 1928; run at Lexington, Ky., in 1927 and 1929; run at Empire City Race Track, Yonkers, N. Y., in 1943.

Year	Winner	Driver	Best time	Value
1926	Guy McKinney	Nat Ray	2.04 3/4	\$73,451.32
1927	Iosola's Worthy	Marvin Childs	2.03 3/4	54,694.44
1928	Spencer	W. H. Leese	2.02 1/2	66,226.25
1929	Walter Dear	W. R. Cox	2.02 3/4	60,309.60
1930	Hanover's Bertha	Tom Berry	2.03	56,859.84
1931	Calumet Butler	R. McMahon	2.03 1/4	50,921.39
1932	The Marchioness	W. Caton	2.01 1/4	49,489.26
1933	Mary Reynolds	Ben White	2.03 3/4	40,459.83
1934	Lord Jim	H. M. Parshall	2.02 3/4	25,845.44
1935	Greyhound	Sep Palin	2.02 1/4	33,321.00
1936	Rosalind	Ben White	2.01 3/4	35,643.83
1937	Shirley Hanover	H. Thomas	2.01 1/2	37,912.58
1938	McLin Hanover	H. Thomas	2.02 1/4	37,962.37
1939	Peter Astra	H. M. Parshall	2.04 1/4	40,502.46
1940	Spencer Scott	F. Egan	2.02	43,685.45
1941	Bill Gallon	Lee Smith	2.05	38,729.86
1942	The Ambassador	Ben White	2.04	38,954.38
1943	Volo Song	Ben White	2.02 1/2	42,298.03
1944	Yankee Maid	H. Thomas	2.04	33,577.12
1945	Titan Hanover	H. Pownall	2.04	50,196.96
1946	Chestertown	Tom Berry	2.02 1/2	50,995.57
1947	Hoot Mon	Sep Palin	2.00	45,417.93
1948	Demon Hanover	H. R. Hoyt	2.02	59,091.18
1949	Miss Tilly	Fred Egan	2.01 2/5	68,895.26

SUMMARY OF 1950 HAMBLETONIAN

Horse	Driver	Heats 1st 2d	
usty Song	Del Miller	1 1	*Banter Hanover..... Ernie Roediger..... 10 11
Star's Pride	John Simpson	2 2	*Mighty Express..... Del Cameron..... 11 12
ord Steward	Guy Crippen	3 4	Choice Hanover..... Foy Funderburk..... 13 †
Florican	Harry Pownall	5 3	a Harry Pownall Stable entry. b Sam Caton Stable entry.
Stuart Hanover	Joe O'Brien	4 5	* Field. † Scratched from heat.
arn Flashy	Al Winger	6 6	Times—2:02, 2:02. Winner—Brown colt by Volomite-Scotch
ic Song	Wendell Wathen	7 9	Song Owner—Hayes Fair Acra Stables, DuQuoin, Ill.
Mariner Hanover	Sam Caton	8 8	Purse distribution—Lusty Song, \$40,537.72; Star's Pride,
Anthony Hanover	Gib White	12 7	\$14,740.98; Lord Steward, \$8,844.59; Florican, \$4,422.30;
ing's Ransom	Tom Berry	9 10	Stuart Hanover, \$2,948.20; Darn Flashy, \$2,211.15. Breeders'
			award—\$1,504.18. Total purse—\$75,209.12. Attendance—
			16,942.

WORLD HARNESS RACING RECORDS

(This compilation recognizes as record-holders those horses which have made the fastest time at their gait, age, and hitch, either against time or in a race at one mile.)

Trotting on Mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.55½	S. F. Palin.....	Sept. 29, 1932	Lexington, Ky.
Yearling—Airdale.....	2.15½	H. C. Moody.....	Oct. 2, 1912	Lexington, Ky.
2-year-old—Titan Hanover.....	2.00	Harry Pownall.....	Oct. 4, 1944	Lexington, Ky.
3-year-old—Titan Hanover.....	1.58	Harry Pownall.....	Sept. 7, 1945	DuQuoin, Ill.
4-year-old—Greyhound.....	1.57¼ (r)	S. F. Palin.....	Aug. 21, 1936	Springfield, Ill.
4-year-old—Spencer Scott.....	1.57¼	Fred Egan.....	Sept. 24, 1941	Lexington, Ky.
Lady driver—Dean Hanover.....	1.53½	Alma Sheppard.....	Sept. 24, 1937	Lexington, Ky.
To Wagon—Lou Dillon.....	2.00	C. K. G. Billings.....	Aug. 24, 1903	Readville, Mass.
To Wagon—Uhlan.....	2.00	C. K. G. Billings.....	Aug. 7, 1911	North Randall, Ohio
Team to Pole—Greyhound and Rosalind.....	1.58¼	S. F. Palin.....	Sept. 5, 1939	Indianapolis, Ind.
Team, Three Abreast—Calumet Dubuque, Mac Aubrey, Hollywood Boris.....	2.10¼	T. F. Walsh.....	Aug. 14, 1937	Goshen, N. Y.
Team, Tandem—John R. McElwyn and Hollywood Harrier.....	2.19¼	T. F. Walsh.....	Sept. 7, 1936	Rutland, Vt.
Four-in-Hand—Damiana, Belnut, Maud V., Nutspra.....	2.30	Not recorded.....	July 4, 1896	Chicago, Ill.
Under Saddle—Greyhound.....	2.01½	Mrs. F. D. Johnson.....	Sept. 27, 1940	Lexington, Ky.
With Running Mate—Uhlan.....	1.54½	Chas. Tanner.....	Oct. 9, 1913	Lexington, Ky.

(r) Record made in race.

Trotting on Half-mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.59¼	S. F. Palin.....	July 16, 1937	Goshen, N. Y.
Yearling—U. Forbes.....	2.21½	H. C. Moody.....	Sept. 18, 1913	Louisville, Ky.
2-year-old—Titan Hanover.....	2.03½ (r)	Harry Pownall.....	Sept. 19, 1944	Delaware, Ohio
3-year-old—Titan Hanover.....	2.01½	Harry Pownall.....	Sept. 18, 1945	Delaware, Ohio
4-year-old—Doctor Spencer.....	2.01¼ (r)	H. Fitzpatrick.....	Sept. 19, 1946	Delaware, Ohio
To Wagon—Sweet Marie.....	2.08½	W. J. Andrews.....	Sept. 21, 1907	Allentown, Pa.
Team to Pole—Calumet Dubuque and Hollywood Boris.....	2.06½	T. F. Walsh.....	Aug. 19, 1937	Skowhegan, Me.
Team, Three Abreast—David Thornton, Hollywood Boris, Capital Stock.....	2.22½	T. F. Walsh.....	July 2, 1937	Gorham, Maine
Under Saddle—Hollywood Boris.....	2.09	Helen James.....	Sept. 17, 1936	Brockton, Mass.

(r) Record made in race.

Pacing on Mile Track

	Time	Driver	Date	Where made
All-age—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Yearling—Royal Lady 2nd.....	2.14¼	O. M. Powell.....	Oct. 20, 1939	Indianapolis, Ind.
2-year-old—Knight Dream.....	2.00½ (r)	F. E. Safford.....	Oct. 2, 1947	Lexington, Ky.
3-year-old—Chief Counsel.....	1.57¼	H. M. Marshall.....	Sept. 30, 1938	Lexington, Ky.
4-year-old—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Lady Driver—Highland Scott.....	1.59¼	Mrs. E. R. Harriman.....	Aug. 22, 1929	Goshen, N. Y.
To Wagon—Dan Patch.....	1.57¼ (w)	M. E. McHenry.....	Oct. 27, 1903	Memphis, Tenn.
Team to Pole—Minor Heir and George Gano.....	2.02	E. J. McCarr.....	Oct. 1, 1912	Columbus, Ohio
Under Saddle—George Gano.....	2.10¼	M. Anderson.....	Sept. 2, 1915	Madison, Wis.
With Running Mate—Flying Jib.....	1.58¼	A. McDowell.....	Oct. 4, 1894	Chillicothe, Ohio

(r) Record made in race.

(w) With windshield.

Pacing on Half-mile Track

	Time	Driver	Date	Where made
All-age—Billy Direct.....	1.59¼	Wm. Fleming.....	Oct. 18, 1939	Altamont, N. Y.
Yearling—Lady Patch.....	2.18¼	O. M. Powell.....	1924	"
2-year-old—Adios.....	2.03¼ (r)	R. L. Parker.....	Sept. 16, 1942	Carthage, Ohio
3-year-old—Mc I Win.....	2.01¼ (r)	H. M. Marshall.....	Oct. 13, 1932	Raleigh, N. C.
4-year-old—White Mountain Boy.....	2:00 3/5 (r)	Don Miller.....	June 10, 1950	Westbury, N. Y.
To Wagon—Dan Patch.....	2.05 (w)	H. C. Hersey.....	Sept. 21, 1905	Allentown, Pa.
Team to Pole—Billy Direct and The Widower.....	2.04¼	Chas. Fleming.....	Oct. 12, 1939	Altamont, N. Y.
Under Saddle—Zombro Hanover.....	2.06½	J. Weipert.....	Sept. 21, 1935	Newark, N. J.

* Data unavailable.

(r) Record made in race.

(w) With windshield.

1950 HARNESS RACING CHAMPIONS

TROTTERS

(Based on performances at one mile)

Mile Track

	Best time
Aged—Demon Hanover and Pronto	
Don	1:59 4/5
4-year-old—Miss Excellency	1:59 3/5
3-year-old—Darn Flashy	2:01
2-year-old—Betsy Volo	2:03 3/5

Half-Mile Track

Aged—Proximity	2:01 1/5
4-year-old—Scotch Pal	2:03
3-year-old—Star's Pride	2:04 2/5
2-year-old—Thunderation	2:07

PACERS

(Based on performances at one mile)

Mile Track

	Best time
Aged—Scottish Pence	1:57 4/5
4-year-old—White Mountain Boy	1:58 1/5
3-year-old—Ferman Hanover	1:59 2/5
2-year-old—Tar Heel	2:00 3/5

Half-Mile Track

Aged—Henry Volo	2:01 1/5
4-year-old—White Mountain Boy	2:00 3/5
3-year-old—Tassel Hanover	2:01 4/5
2-year-old—Solicitor	2:04 2/5

STAKE WINNERS IN 1950

Trotting

AGED

	Best time	Value
American Championship—Proximity	2:03 1/5	\$25,000
Roosevelt 2-Mile—Pronto Don	4:20 3/5	50,000
Golden West Trot—Proximity	2:31 1/5	50,000
Gotham Trot—Chris Spencer	3:10 1/5	25,000
Toledo Times Trot—Chris Spencer	2:00 1/5	25,000

3-YEAR-OLDS

Championship Stallion—Star's Pride	2:04 1/5	8,286
Coaching Club Oaks—Honor Bright	2:08 1/5	14,935
Hambletonian—Lusty Song	2:02	75,209
Horseman Futurity—Lusty Song	2:02	13,003
Kentucky Futurity—Star's Pride	2:02	68,355
Reading Futurity—Honor Bright	2:03 1/5	10,688
Review Futurity—Lusty Song	2:03 1/5	14,235
L. B. Sheppard Filly—Honor Bright	2:04 1/5	11,051
Trotting Club Stallion—Lusty Song	2:04	13,744

2-YEAR-OLDS

Castleton Farm—Scotch Rhythm	2:06	32,398
Greyhound—Mighty Fine	2:04 1/5	23,162
Horseman—Mighty Fine	2:04 1/5	41,148
L. B. Sheppard Filly—Betsy Volo	2:03 1/5	13,324

Pacing

AGED

	Best time	Value
Golden West—Jerry the First	2:32 1/5	\$50,000
Nassau—Scottish Pence	4:17 1/5	50,000
National Derby—Good Time	2:02 1/5	25,000
Yonkers Derby—Good Time	3:08	25,000

3-YEAR-OLDS

Championship Stallion—Dudley Hanover	*2:03 1/5	8,880
Horseman Futurity—Quilla Hanover	2:00 1/5	14,804
Little Brown Jug—Dudley Hanover	2:02 1/5	56,525
Review Futurity—Quilla Hanover	2:01 1/5	14,804
Reading Futurity—Wayzoff	2:08	11,318
Trotting Club—Quilla Hanover	2:02 1/5	11,920
L. B. Sheppard Filly—Direct Gal	2:01 1/5	11,396
Village Farm—Irish Hal	2:04	14,115

* Best time by Quilla Hanover in 1st heat.

2-YEAR-OLDS

Fox—Solicitor	*2:03 1/5	33,877
Geers—Tar Heel	2:03	14,480
Little Pat—Tar Heel	2:03 1/5	18,737
L. B. Sheppard Filly—Floating Dream	2:00 1/5	12,576
Village Farm—Tar Heel	2:05 1/5	18,180

* Best time by Tar Heel in 2d heat. † World record for 2-year-old filly.

WORLD RECORDS MADE IN 1950

Trotting

Distance	Track	Made by	Place	Date	Time
1 1/16 mi.	.....mile	Proximity	Arcadia, Calif.	May 20	2:06 2/5
1 1/8 mi.	.....mile	Proximity	Arcadia, Calif.	May 30	2:14 3/5
1 1/4 mi.	.....mile	Proximity	Arcadia, Calif.	June 10	2:31 2/5
1 mi.	.....half-mile	Proximity	Westbury, N. Y.	June 24	2:01 1/5

Pacing

1 1/8 mi.	.....mile	Prince Jay	Arcadia, Calif.	June 3	2:15 1/5
1 mi.	.....half-mile	White Mountain Boy	Westbury, N. Y.	June 10	2:00 3/5
1 1/2 mi.	.....half-mile	Good Time	Yonkers, N. Y.	Aug. 17	3:08

Proximity Sets Money-Winning Mark

When Proximity, an 8-year-old mare owned by Ralph and Gordon Verhurst of Victor, N. Y., took a first and second in the two heats of the 1950 running of the \$15,000 Sportsman's Trot at Sportsman's Park, Chicago, and raised her earnings to \$210,129, harness racing had a new money-winning champion for the first time in 73 years. Goldsmith Maid set the previous record of \$206,462 in 1877. A fourth-place finish in the \$25,000 Gotham Trot at the Yonkers (N. Y.) Raceway last Oct. 13 increased Proximity's total to \$244,254.69.

1952 OLYMPIC DATES

Winter Games (at Oslo, Norway)—Feb. 14 through Feb. 25.
Summer Games (at Helsinki, Finland)—July 19 through Aug. 3.

Miami Stops W. and M. Streak

The longest winning streak in the history of intercollegiate tennis came to an end on April 26, 1950, when the University of Miami (Fla.) beat William and Mary, 8-1. The Virginians had been unbeaten for five years and had compiled a skein extending through 82 team matches.

HORSE RACING

ANCIENT DRAWINGS on stone and bone prove that horse racing is at least 3000 years old, but Thoroughbred Racing is a modern development. Practically every thoroughbred in training today traces its registered ancestry back to one or more of three sires that arrived in England about 1728 from the Near East and became known, from the names of their owners, as the Byerly Turk, the Darley Arabian and the Godolphin Arabian. The Jockey Club (English) was founded at Newmarket in 1750 or 1751 and became the custodian of the Stud Book as well as the court of last resort in deciding turf affairs.

There was horse racing in this country before the Revolution, but the great lift to the breeding industry came with the importation in 1798, by Col. John Hoomes of Virginia, of Diomed, winner of the Epson Derby of 1780. Diomed's lineal descendants included such famous stars of the American turf as American Eclipse and Lexington. From 1800 to the time of the Civil War there were race courses and breeding establishments plentifully scattered through Virginia, North Carolina, South Carolina, Tennessee, Kentucky and

Louisiana. In fact, thoroughbred racing was largely a Southern sport and that was one reason why the Confederacy had such excellent cavalry in the Civil War. A century ago crack horses were matched in four-mile races that were run in heats, best two out of three!

The oldest stake event in North America is the King's Plate, a Canadian fixture that was first run in the Province of Quebec in 1836. The oldest stake event in the United States is The Travers, which was first run at Saratoga in 1864. The gambling that goes with horse racing and trickery by jockeys, trainers, owners and track officials caused attacks on the sport by reformers and a demand among horse racing enthusiasts for an honest and effective control of some kind, but nothing of lasting value to racing came of this until the formation of The Jockey Club in 1894. The Jockey Club, composed of fifty members chosen from the aristocracy of the turf, was all-powerful in racing regulation until the State Racing Commissions came into being as a result of mutual betting and the great revenues that came with the tax on the "daily handle."

Horse Racing Statistics

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HISTORY OF TRADITIONAL STAKES AMERICAN DERBY

Washington Park; 3-year-olds; 1¼ miles.

Run at old Washington Park, Chicago, through 1904; run at Hawthorne in 1916; run at Arlington Park in 1929. Distance 1 1/2 miles until 1928.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1884	Modesty.....	I. Murphy.....	117	\$10,700	1928	Toro.....	E. Ambrose....	126	\$21,920
1885	Volante.....	I. Murphy.....	123	9,570	1929	Windy City.....	L. McDermott....	118	47,550
1886	Silver Cloud.....	I. Murphy.....	121	8,160	1930	Reveille Boy.....	W. Fronk.....	118	51,200
1887	C. H. Todd.....	Hamilton.....	118	13,690	1931	Mate.....	G. Ellis.....	126	48,670
1888	Emperor of Norfolk	I. Murphy.....	123	14,340	1932	Gusto.....	S. Coucci.....	118	48,205
1889	Spokane.....	T. Kiley.....	121	15,400	1933	Mr. Khayyam.....	P. Walls.....	121	23,410
1890	Uncle Bob.....	T. Kiley.....	115½	15,260	1934	Cavalcade.....	M. Garner.....	126	23,315
1891	Strathmeath.....	Covington.....	112	18,610	1935	Black Helen.....	D. Meade.....	118	25,020
1892	Carlsbad.....	R. Williams.....	122	16,930	1937	Dawn Play.....	L. Balaski.....	116	25,400
1893	Boundless.....	E. Garrison.....	122	49,500	1940	Mioland.....	J. Adams.....	123	44,900
1894	Rey el S'ta A'ta.....	E. Van Kuren.....	122	19,750	1941	Whirlaway.....	A. Robertson....	126	44,970
1898	Pink Coat.....	W. Martin.....	127	9,225	1942	Alsab.....	G. Woolf.....	126	60,855
1900	Sidney Lucas.....	J. Bullman.....	122	9,425	1943	Askmenow.....	G. Woolf.....	115	56,150
1901	Robert Waddell.....	J. Bullman.....	119	19,275	1944	By Jimminy.....	G. Woolf.....	122	61,650
1902	Wyeth.....	L. Lyne.....	122	19,875	1945	Fighting Step.....	G. South.....	118	68,950
1903	The Picket.....	Helgesen.....	115	27,025	1946	Eternal Reward.....	R. Campbell.....	118	83,455
1904	Highball.....	G. C. Fuller.....	122	26,325	1947	Fervent.....	D. Dodson.....	118	70,950
1916	Dodge.....	F. Murphy.....	126	6,850	1948	Citation.....	E. Arcaro.....	126	66,450
1926	Boot to Boot.....	A. Johnson.....	121	89,000	1949	Ponder.....	S. Brooks.....	126	66,150
1927	Hydromel.....	L. McDermott....	116	22,750	1950	Hill Prince.....	E. Arcaro.....	126	60,050

ARLINGTON FUTURITY

Arlington Park; 2-year-olds; $\frac{1}{8}$ mile.

American National Futurity in 1927 and 1928. Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1927	Misstep.....	E. Pool.....	122	\$ 9,360	1940	Swain.....	J. Adams.....	117	\$34,470
1928	Double Heart.....	L. Gewing.....	115	21,920	1941	Sun Again.....	W. Eads.....	122	34,655
1932	Ladysman.....	R. Jones.....	117	38,010	1942	Occupation.....	L. Balaski.....	117	51,500
1933	Far Star.....	D. Bellizzi.....	116	31,020	1943	Jezrahel.....	O. Grohs.....	116	48,650
1934	Toro Nancy.....	R. Jones.....	112	41,725	1944	Free for All.....	O. Grohs.....	122	48,525
1935	Grand Slam.....	J. Bryson.....	122	45,135	1945	Spy Song.....	S. Brooks.....	122	58,650
1936	Case Ace.....	A. Robertson.....	117	36,540	1946	Cosmic Bomb.....	S. Clark.....	122	66,875
1937*	Tiger.....	A. Robertson.....	122	.....	1947	Piet.....	Dell Jessop.....	122	66,900
	Teddy's Comet.....	G. Smith.....	117	18,000	1948	Mr. Busher.....	F. Zufelt.....	122	62,725
1938	Thingamabob.....	E. Arcaro.....	117	31,110	1949	Wisconsin Boy.....	J. Chestnut.....	122	60,075
1939	Andy K.....	J. E. Oros.....	114	33,735	1950	To Market.....	A. Rivera.....	122	56,215

* Dead Heat.

BELMONT STAKES

Belmont Park; 3-year-olds; $1\frac{1}{4}$ miles.Run at Jerome Park prior to 1890; run at Morris Park from 1890 to 1905. Distance 1 $\frac{1}{2}$ miles prior to 1874; reduced to 1 $\frac{1}{4}$ miles, 1874; reduced to 1 $\frac{1}{2}$ miles, 1890; changed to 1 $\frac{1}{4}$ miles, 1893; increased to 1 $\frac{1}{2}$ miles, 1895; increased to 1 $\frac{1}{4}$ miles, 1896; changed to 1 $\frac{1}{2}$ miles in 1904 and 1905; increased to 1 $\frac{1}{4}$ miles, 1926.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1867	Ruthless.....	J. Gilpatrick.....	107	\$ 1,850	1908	Colin.....	J. Nottter.....	126	\$22,765
1868	General Duke.....	R. Swim.....	110	2,800	1909	Joe Madden.....	E. Dugan.....	126	24,550
1869	Fenian.....	C. Miller.....	110	3,350	1910	Sweep.....	J. Butwell.....	126	9,700
1870	Kingfisher.....	W. Dick.....	110	3,750	1913	Prince Eugene.....	R. Troxler.....	109	2,825
1871	Harry Bassett.....	W. Miller.....	110	5,450	1914	Luke McLuke.....	M. Buxton.....	126	3,025
1872	Joe Daniels.....	J. Rowe.....	110	4,500	1915	The Finn.....	G. Byrne.....	126	1,825
1873	Springbok.....	J. Rowe.....	110	5,200	1916	Friar Rock.....	E. Haynes.....	126	4,100
1874	Saxon.....	G. Bardee.....	110	4,200	1917	Hourless.....	J. Butwell.....	126	5,800
1875	Calvin.....	R. Swim.....	110	4,450	1918	Johren.....	F. Robinson.....	126	8,950
1876	Algerine.....	W. Donohue.....	110	3,700	1919	Sir Barton.....	J. Loftus.....	126	11,950
1877	Cloverbrook.....	C. Holloway.....	110	5,200	1920	Man o' War.....	C. Kummer.....	126	7,950
1878	Duke of Magenta.....	L. Hughes.....	118	3,850	1921	Grey Lag.....	E. Sande.....	126	8,650
1879	Spendthrift.....	S. Evans.....	118	4,250	1922	Pillory.....	C. H. Miller.....	126	39,200
1880	Grenada.....	L. Hughes.....	118	2,800	1923	Zev.....	E. Sande.....	126	38,000
1881	Saunterer.....	T. Costello.....	118	3,000	1924	Mad Play.....	E. Sande.....	126	42,380
1882	Forester.....	J. McLaughlin.....	118	2,650	1925	American Flag.....	A. Johnson.....	126	38,500
1883	George Kinney.....	J. McLaughlin.....	118	3,070	1926	Crusader.....	A. Johnson.....	126	48,550
1884	Panique.....	J. McLaughlin.....	118	3,150	1927	Chance Shot.....	E. Sande.....	126	60,910
1885	Tyrant.....	P. Duffy.....	118	2,710	1928	Vito.....	C. Kummer.....	126	63,430
1886	Inspector B.....	J. McLaughlin.....	118	2,720	1929	Blue Larkspur.....	M. Garner.....	126	59,650
1887	Manover.....	J. McLaughlin.....	118	2,900	1930	Gallant Fox.....	E. Sande.....	126	66,040
1888	Sir Dixon.....	J. McLaughlin.....	118	3,440	1931	Twenty Grand.....	C. Kuntsinger.....	126	58,770
1889	Eric.....	W. Hayward.....	118	4,960	1932	Faireno.....	T. Malley.....	126	55,120
1890	Burlington.....	S. Barnes.....	118	8,560	1933	Hurrryoff.....	M. Garner.....	126	49,490
1891	Foxford.....	E. Garrison.....	118 $\frac{1}{2}$	5,070	1934	Peace Chance.....	W. D. Wright.....	126	43,410
1892	Patron.....	W. Hayward.....	122	6,610	1935	Omaha.....	W. Saunders.....	126	35,480
1893	Comanche.....	W. Simms.....	117	5,310	1936	Granville.....	J. Stout.....	126	29,300
1894	Henry of Navarre.....	W. Simms.....	117	6,680	1937	War Admiral.....	C. Kuntsinger.....	126	38,020
1895	Belmar.....	F. Taral.....	119	2,700	1938	Pasteurized.....	J. Stout.....	126	34,530
1896	Hastings.....	H. Griffin.....	122	3,025	1939	Johnstown.....	J. Stout.....	126	37,020
1897	Scottish Chieftain.....	J. Scherrer.....	115	3,550	1940	Bimelech.....	F. A. Smith.....	126	35,030
1898	Bowling Brook.....	F. Littlefield.....	122	7,810	1941	Whirlaway.....	E. Arcaro.....	126	39,770
1899	Jean Boreaud.....	R. Clawson.....	122	9,445	1942	Shut Out.....	E. Arcaro.....	126	44,520
1900	Ildrim.....	N. Turner.....	126	14,790	1943	Count Fleet.....	J. Longden.....	126	35,340
1901	Commando.....	H. Spencer.....	126	11,595	1944	Bounding Home.....	G. L. Smith.....	126	55,000
1902	Masterman.....	J. Bullman.....	126	13,220	1945	Pavot.....	E. Arcaro.....	126	52,675
1903	Africander.....	J. Bullman.....	126	12,285	1946	Assault.....	W. Mehrtens.....	126	75,400
1904	Delhi.....	G. Odum.....	126	11,575	1947	Phalanx.....	R. Donoso.....	126	78,900
1905	Tanya.....	E. Hildebrand.....	121	17,240	1948	Citation.....	E. Arcaro.....	126	77,700
1906	Burgomaster.....	L. Lyne.....	126	22,700	1949	Capot.....	T. Atkinson.....	126	60,900
1907	Peter Pan.....	G. Mountain.....	126	22,765	1950	Middleground.....	W. Boland.....	126	61,350

"TRIPLE CROWN" WINNERS IN THE UNITED STATES
(Kentucky Derby, Preakness and Belmont Stakes)

Year	Horse	Owner	Year	Horse	Owner
1919	Sir Barton.....	J. K. L. Ross	1941	Whirlaway.....	Warren Wright
1930	Gallant Fox.....	William Woodward	1943	Count Fleet.....	Mrs. John Hertz
1935	Omaha.....	William Woodward	1946	Assault.....	Robert J. Kleberg
1937	War Admiral.....	Samuel D. Riddle	1948	Citation.....	Warren Wright

BROOKLYN HANDICAP

Aqueduct; 3-year-olds and over; 1½ miles.

Run at Belmont Park in 1913 and at Gravesend prior to 1911. Distance 1½ miles from 1915 to 1939, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1887	Dry Monopole (4)....	A. McCarthy.....	106	\$ 5,850	1920	Cirrus (4).....	L. Ensor.....	108	\$ 5,950
1888	The Bard (5).....	W. Hayward.....	125	6,925	1921	Grey Lag (3).....	L. Fator.....	112	7,600
1889	Exile (7).....	A. Hamilton.....	116	6,900	1922	Extremator (7).....	A. Johnson.....	135	7,600
1890	Castaway II, (4).....	W. Bunn.....	100	6,900	1923	Little Chief (4).....	E. Sande.....	114	7,600
1891	Tenny (5).....	Barnes.....	128	14,800	1924	Hephaistos (5).....	J. Maiben.....	106	7,600
1892	Judge Morrow (5).....	A. Covington.....	116	17,750	1925	Mad Play (4).....	L. Fator.....	123	7,600
1893	Diablo (7).....	F. Taral.....	112	17,750	1926	Single Foot (4).....	C. Turner.....	110	11,950
1894	Dr. Rice (4).....	F. Taral.....	112	17,750	1927	Peanuts (5).....	H. Thurber.....	112	13,150
1895	Hornpipe (4).....	A. Hamilton.....	105	7,750	1928	Black Panther (4).....	J. Maiben.....	105	13,750
1896	Sir Walter (6).....	F. Taral.....	113	7,750	1929	Light Carbine (6).....	G. Rose.....	97	14,300
1897	Howard Mann (4).....	H. Martin.....	106	7,750	1930	Sortie (5).....	P. Walls.....	111	10,800
1898	Ornament (4).....	T. Sloan.....	127	7,800	1931	Questionnaire (4).....	R. Workman.....	127	13,900
1899	Banastar (4).....	D. Maher.....	110	7,800	1932	Blenheim (4).....	H. Mills.....	109	9,800
1900	Kinley Mack (4).....	P. McCue.....	122	7,800	1933	Dark Secret (4).....	H. Mills.....	115	3,380
1901	Conroy (3).....	W. O'Connor.....	102½	7,800	1934	Discovery (3).....	J. Bejshak.....	113	2,925
1902	Refha (4).....	W. O'Connor.....	104	7,800	1935	Discovery (4).....	J. Bejshak.....	123	10,200
1903	Irish Lad (3).....	F. O'Neill.....	103	14,950	1936	Discovery (5).....	L. Fallon.....	136	10,575
1904	The Picket (4).....	E. Helgesen.....	119	15,800	1937	Seabiscuit (4).....	J. Pollard.....	122	18,025
1905	Delhi (4).....	T. Burns.....	124	15,800	1938	The Chief (3).....	J. Longden.....	105	18,450
1906	Tokalon (5).....	W. Bedell.....	108	15,800	1939	Cravat (4).....	B. James.....	126	18,250
1907	Superman (3).....	W. Miller.....	99	15,800	1940	Isolator (7).....	J. Stout.....	119	16,900
1908	Celt (3).....	J. Notter.....	106	19,750	1941	Fenelon (4).....	J. Stout.....	119	19,250
1909	King James (4).....	E. Dugan.....	126	3,850	1942	Whirlaway (4).....	G. Woolf.....	128	23,650
1910	Fitz Herbert (4).....	E. Dugan.....	130	4,800	1943	Devil Diver (4).....	S. Brooks.....	123	23,200
1913	Whisk Broom II, (6).....	J. Notter.....	130	3,125	1944	Four Freedoms (4).....	E. Arcaro.....	116	39,720
1914	Buckhorn (5).....	J. McCahey.....	113	3,350	1945	Stymie (4).....	R. Permane.....	116	39,120
1915	Tartar (5).....	J. McTaggart.....	103	3,850	1946	Gallorlette (4).....	J. Jessop.....	118	41,100
1916	Friar Rock (3).....	E. Haynes.....	108	3,850	1947	Assault (4).....	E. Arcaro.....	133	38,100
1917	Borrow (4).....	W. Knapp.....	117	4,850	1948	Conniver (4).....	T. Atkinson.....	114	39,300
1918	Cudgel (4).....	L. Lyke.....	129	4,850	1949	Assault (6).....	D. Gorman.....	122	40,600
1919	Eternal (3).....	A. Schuttinger.....	105	4,850	1950	My Request (5).....	T. Atkinson.....	119	41,000

BUTLER HANDICAP

Empire City; 3-year-olds and over; 1 3/16 miles.

Distance 1½ miles in 1935. Run at Jamaica since 1943.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Discovery (4).....	J. Bejshak.....	132	\$11,675	1943	Thumbs Up (4).....	O. Grohs.....	116	\$23,300
1936	Good Gamble (4).....	L. Fallon.....	119	9,975	1944	First Fiddle (5).....	J. Longden.....	126	38,225
1937	Seabiscuit (4).....	J. Pollard.....	126	18,025	1945	Stymie (4).....	R. Permane.....	121	38,770
1938	Esopa (6).....	N. Wall.....	114	19,400	1946	Lucky Draw (5).....	H. Woodhouse.....	105	39,900
1939	Lovely Night (3).....	N. Wall.....	104	16,950	1947	Assault (4).....	E. Arcaro.....	135	36,700
1940	Can't Wait (5).....	B. James.....	111	21,000	1948	Donor (4).....	R. Permane.....	117	58,850
1941	Foxbrough (5).....	J. Stout.....	118	19,800	1949	Conniver (5).....	A. Kirkland.....	112	40,300
1942	Tola Rose (5).....	W. Mehrtens.....	103	22,800	1950	Loser Weeper (5).....	E. Guerin.....	118	40,700

CLASSIC STAKES

Arlington Park; 3-year-olds; 1¼ miles.

Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1929	Blue Larkspur.....	M. Garner.....	126	\$59,900	1940	Sirocco.....	G. Woolf.....	121	\$37,935
1930	Gallant Fox.....	E. Sande.....	126	64,750	1941	Attention.....	C. Bierman.....	121	42,450
1931	Mate.....	A. Robertson.....	126	73,650	1942	Shut Out.....	E. Arcaro.....	126	69,700
1932	Gusto.....	S. Coucci.....	126	76,600	1943	Slide Rule.....	F. Zufelt.....	120	53,450
1933	Inlander.....	R. Jones.....	118	32,755	1944	Twilight Tear.....	L. Haas.....	114	62,050
1934	Cavalcade.....	M. Garner.....	126	30,325	1945	Pot o' Luck.....	D. Dodson.....	119	67,150
1935	Omaha.....	W. D. Wright.....	126	28,975	1946	The Dude.....	M. Duhon.....	119	76,850
1936	Granville.....	J. Stout.....	126	28,400	1947	But Why Not.....	W. Mehrtens.....	117	71,500
1937	Flying Scot.....	J. Gilbert.....	123	27,375	1948	Papa Redbird.....	R. L. Baird.....	122	66,600
1938	Nedarr.....	W. D. Wright.....	121	27,500	1949	Ponder.....	S. Brooks.....	126	65,450
1939	Challedon.....	H. Richards.....	126	35,600	1950	Greek Song.....	O. Scurlock.....	120	58,950

King's Plate to McGill

Chris Rogers rode Vince Sheridan's McGill to a nose victory over Sir Strome in the

91st running of the King's Plate at Woodbine Park, Toronto, last May. Rogers also won the classic with E. P. Taylor's Epic in 1949.

EPSOM DERBY

Epsom Downs, England; 3-year-olds; 1 mile, 885 yards.

Distance one mile prior to 1844. Distance 1½ miles since 1939. Run at Newmarket from 1915 to 1918, inclusive and from 1940 to 1945, inclusive, and called the New Derby Stakes.

Year	Winner	Owner	Win val.	Year	Winner	Owner	Win val.
1780	Diomed	Sir C. Bunbury	\$ 5,620	1847	Cossack	Mr. Pedley	\$26,500
1781	Y. Eclipse	Mr. O' Kelly	6,255	1848	Surplice	Lord Clifton	28,000
1782	Assassin	Lord Egremont	5,500	1849	T. Flying Dutchman	Lord Eglington	31,875
1783	Saltram	Mr. Parker	5,000	1850	Voltigeur	Lord Zetland	29,375
1784	Sergeant	Mr. O' Kelly	5,125	1851	Teddington	Sir J. Hawley	26,875
1785	Aimwell	Lord Clermont	4,375	1852	Dan. O'Rourke	Mr. Bowes	24,350
1786	Noble	Mr. Panton	5,000	1853	W. Australian	Mr. Bowes	26,500
1787	Sir P. Teazle	Lord Derby	4,500	1854	Andover	Mr. Gully	29,250
1788	Sir Thomas	Prince of Wales	4,625	1855	Wild Dayrell	F. Popham	24,125
1789	Skyscraper	Duke of Bedford	4,652	1856	Ellinton	Admiral Harcourt	28,125
1790	Rhadamanthus	Lord Grosvenor	4,750	1857	Blink Bonny	W. l'Anson	27,750
1791	Eager	Duke of Bedford	4,625	1858	Beadsman	Sir J. Hawley	26,615
1792	John Bull	Lord Grosvenor	4,875	1859	Musjid	Sir J. Hawley	33,250
1793	Waxy	Sir F. Poole	6,500	1860	Thormanby	Mr. Merry	30,500
1794	Daedalus	Lord Grosvenor	6,125	1861	Kettledrum	Colonel Towneley	30,500
1795	Spread Eagle	Sir F. Standish	6,500	1862	Caractacus	Mr. Snewing	32,125
1796	Didelot	Sir F. Standish	6,500	1863	Macaroni	R. C. Naylor	34,500
1797	Colt by Fidget	Duke of Bedford	5,000	1864	Blair Athol	W. l'Anson	32,500
1798	Sir Harry	Mr. Cookson	5,375	1865	Gladiateur	C't F. deLagrange	34,375
1799	Archduke	Sir F. Standish	5,000	1866	Lord Lyon	R. Sutton	37,750
1800	Champion	Mr. Wilson	5,250	1867	Hermit	Mr. Chaplin	35,000
1801	Eleanor	Sir C. Bunbury	4,375	1868	Blue Gown	Sir J. Hawley	34,000
1802	Tyrant	Duke of Grafton	4,750	1869	Pretender	J. Johnstone	31,125
1803	Ditto	Sir H. Williamson	4,625	1870	Kingcraft	Lord Falmouth	38,875
1804	Hannibal	Lord Egremont	4,625	1871	Favonius	B. Rothschild	25,625
1805	Card. Beaufort	Lord Egremont	6,250	1872	Cremonne	H. Savile	24,250
1806	Paris	Lord Foley	5,875	1873	Doncaster	Mr. Merry	24,125
1807	Election	Lord Egremont	5,875	1874	Geo. Frederick	W. S. Cartwright	26,750
1808	Pan	Sir H. Williamson	5,500	1875	Calopin	Prince Bathany	24,750
1809	Pope	Duke of Grafton	6,375	1876	Kisber	A. Baltazzi	27,875
1810	Whalebone	Duke of Grafton	6,500	1877	Silbio	Lord Falmouth	30,250
1811	Phantom	Sir J. Shelley	7,500	1878	Sefton	W. S. Crawford	29,125
1812	Octavius	Mr. Ladbrook	7,125	1879	Sir Bevv's	Mr. Acton	35,125
1813	Smolensko	Sir C. Bunbury	7,375	1880	Bend Or	D. of Westminster	31,875
1814	Blucher	Lord Stawell	7,125	1881	Iroquoist	P. Lorillard	29,625
1815	Whisker	Duke of Grafton	7,500	1882	Shotover	D. of Westminster	23,875
1816	Prince Leopold	Duke of York	7,250	1883	St. Blaise	Sir F. Johnstone	25,750
1817	Azor	Mr. Payne	8,625	1884*	St. Gatien	J. Hammond	
1818	Sam	Mr. Thornhill	8,500		Harvester	Sir J. Willoughby	24,500
1819	Tiresias	Duke of Portland	8,250	1885	Melton	Lord Hastings	22,625
1820	Sailor	Mr. Thornhill	7,875	1886	Ormonde	D. of Westminster	23,500
1821	Gustavus	Mr. Hunter	7,875	1887	Mr. Hampton	Mr. Abington	22,625
1822	Moses	Duke of York	7,625	1888	Ayrshire	Duke of Portland	18,375
1823	Emilius	Mr. Udny	8,375	1889	Donovan	Duke of Portland	20,250
1824	Cedric	Sir J. Shelley	8,875	1890	Sanfoin	Sir J. Miller	29,700
1825	Middleton	Lord Jersey	9,000	1891	Common	Sir F. Johnstone	27,550
1826	Lap Dog	Lord Egremont	9,000	1892	Sir Hugo	Lord Bradford	34,900
1827	Mameluke	Lord Jersey	13,500	1893	Isinglass	Mr. McCalmont	27,575
1828	Cadland	Duke of Rutland	13,000	1894	Ladas	Lord Rosebery	27,250
1829	Frederick	Mr. Gratwicke	12,750	1895	Sir Visto	Lord Rosebery	27,250
1830	Priam	Mr. Chifney	13,500	1896	Persimmon	Prince of Wales	27,250
1831	Spaniel	Lord Lowthar	15,500	1897	Galtee More	Mr. Gubbins	27,250
1832	St. Giles	Mr. Ridsdale	14,375	1898	Jeddah	J. Larnach	27,250
1833	Dangerous	Mr. Saddler	17,625	1899	Flying Fox	D. of Westminster	27,250
1834	Plenipotentiary	Mr. Batson	17,125	1900	Diamond Jubilee	Prince of Wales	27,250
1835	Mundig	Mr. Bowes	16,750	1901	Volodyovski	W. C. Whitney	28,350
1836	Bay Middleton	Lord Jersey	18,125	1902	Ard Patrick	J. Gubbins	27,250
1837	Phosphorus	Lord Berner	14,000	1903	Rock Sand	Sir J. Miller	32,500
1838	Amato	Sir G. Heatcote	13,265	1904	St. Amant	L. de Rothschild	32,250
1839	Bloomsbury	Mr. W. Ridsdale	19,500	1905	Cicero	Lord Rosebery	32,250
1840	Little Wonder	Mr. Robertson	19,125	1906	Spearmint	Maj. E. Loder	32,250
1841	Coronation	Mr. Rawlinson	21,875	1907	Orbyr	R. Croker	32,250
1842	Attila	Colonel Anson	24,500	1908	Signorinetta	Chev. Ginistrelli	32,250
1843	Cotherstone	Mr. Bowes	21,250	1909	Minoru	King Edward	32,250
1844	Orlando	Colonel Peel	21,750	1910	Lemberg	Mr. Fairlie	32,250
1845	Merry Monarch	Mr. Gratwick	20,000	1911	Sunstar	J. B. Joel	32,250
1846	Pyrrhus the First	Mr. Gully	26,500				

* Dead heat; stake divided. † American bred or owned.

Epsom Derby (Cont.)

Year	Winner	Owner	Win val.	Year	Winner	Owner	Win val.
1912	Tagalie.....	W. Raphael.....	32,250	1932	April the Fifth.....	T. Walls.....	34,056
1913	Abeyour.....	A. P. Cunliffe.....	32,250	1933	Hyperion.....	Lord Derby.....	49,182
1914	Durbar II†.....	H. B. Duryea.....	32,250	1934	Windsor Lad.....	H. H. M. of Raj'pla.....	46,760
1915	Pommern.....	S. Joel.....	12,000	1935	Bahram.....	H. H. Aga Khan.....	46,080
1916	Fifiella.....	E. Hulton.....	14,500	1936	Mahmoud.....	H. H. Aga Kahn.....	49,670
1917	Gay Crusader.....	Mr. Fairie.....	10,250	1937	Mid-Day Sun.....	Mrs. G. B. Miller.....	47,205
1918	Gainsborough.....	Lady Jas. Douglas.....	20,000	1938	Bois Roussel.....	P. Beatty.....	43,644
1919	Grand Parade.....	Lord Glanely.....	32,250	1939	Blue Peter.....	Lord Rosebery.....	42,680
1920	Spion Kop.....	Maj. G. Loder.....	32,250	1940	Pont l'Eveque.....	F. Darling.....	23,803
1921	Humorist.....	J. B. Joel.....	32,250	1941	Owen Tudor.....	Mrs. M'D'ald-Buc'n.....	18,003
1922	Captain Cuttle.....	Lord Woolavington.....	51,250	1942	Watling Street.....	Lord Derby.....	15,530
1923	Papyrus.....	Ben Irish.....	56,800	1943	Straight Lead.....	Miss Dorothy Paget.....	17,552
1924	Sansovino.....	Lord Derby.....	58,025	1944	Ocean Swell.....	Lord Rosebery.....	23,604
1925	Manna.....	H. E. Morris.....	55,475	1945	Dante.....	Sir Eric Ohlson.....	33,356
1926	Coronach.....	Lord Woolavington.....	51,750	1946	Airborne.....	J. E. Ferguson.....	38,662
1927	Call Boy.....	Frank Curzon.....	63,075	1947	Pearl Diver.....	B. G. de Waldner.....	38,788
1928	Felstead.....	Sir H. C'liffe-Owen.....	58,025	1948	My Love.....	H. H. Aga Khan.....	49,936
1929	Trigo.....	W. Barnett.....	59,825			Leon Volterra.....	
1930	Blenheim.....	H. H. Aga Khan.....	50,180	1949	Nimbus.....	Mrs. M. Glenister.....	56,980
1931	Cameronian.....	J. A. Dewar.....	48,640	1950	Galcador.....	Marcel Boussac.....	47,628

FUTURITY STAKES

Belmont Park; 2-year-olds; 6½ furlongs

Distance 1,263 yards 1 foot from 1892 to 1901, inclusive. Distance 3/4 mile prior to 1892 and from 1902 to 1924, inclusive; about 7/8 mile from 1925 to 1933, inclusive. Run at Sheephead Bay until 1910. Run at Saratoga by special arrangement in 1910, 1913 and 1914.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1888	Proctor Knott.....	S. Barnes.....	112	\$40,900	1921	Bunting.....	F. Coltilette.....	117	39,700
1889	Chaos.....	G. Day.....	109	54,500	1922	Sally's Alley.....	A. Johnson.....	116	47,550
1890	Potomac.....	A. Hamilton.....	115	67,675	1923	St. James.....	T. McTaggart.....	130	64,810
1891	His Highness.....	J. McLaughlin.....	130	61,675	1924	Mother Goose.....	L. McAtee.....	114	65,730
1892	Morello.....	W. Hayward.....	118	40,450	1925	Pompey.....	L. Fator.....	127	58,480
1893	Dominio.....	F. Taral.....	130	48,855	1926	Scapa Flow.....	L. Fator.....	122	65,980
1894	The Butterflies.....	H. Griffin.....	112	48,710	1927	Anita Peabody.....	C. Lang.....	124	91,790
1895	Requital.....	H. Griffin.....	115	53,190	1928	High Strung.....	L. McAtee.....	122	97,990
1896	Ogden.....	F. Turbiville.....	115	43,790	1929	Whichone.....	R. Workman.....	125	105,730
1897	L'Alouette.....	R. Clawson.....	115	34,290	1930	Jamestown.....	L. McAtee.....	130	99,600
1898	Martimas.....	H. Lewis.....	118	36,610	1931	Top Flight.....	R. Workman.....	127	94,780
1899	Chacornac.....	H. Spencer.....	114	30,630	1932	Kerry Patch.....	P. Walls.....	122	88,690
1900	Ballyhoo Bey.....	T. Sloan.....	112	33,580	1933	Singing Wood.....	R. Jones.....	122	81,700
1901	Yankee.....	W. O'Connor.....	119	36,850	1934	Chance Sun.....	W. D. Wright.....	122	77,510
1902	Savable.....	L. Lyne.....	119	44,500	1935	Tintagel.....	S. Coucci.....	122	66,450
1903	Hamburg Belle.....	G. Fuller.....	114	36,600	1936	Pompoon.....	H. Richards.....	127	55,630
1904	Artful.....	E. Hildebrand.....	114	40,830	1937	Menow.....	C. Kurtzinger.....	119	56,800
1905	Ormondale.....	A. Redfern.....	117	32,960	1938	Porter's Mite.....	B. James.....	119	57,045
1906	Electioneer.....	W. Shaw.....	117	36,880	1939	Bimelech.....	F. A. Smith.....	126	57,710
1907	Colin.....	W. Miller.....	125	26,640	1940	Our Boots.....	E. Arcaro.....	119	65,800
1908	Maskette.....	J. Notter.....	118	26,110	1941	Some Chance.....	W. Eads.....	122	57,900
1909	Sweep.....	J. Butwell.....	126	24,100	1942	Occupation.....	G. Woolf.....	126	57,890
1910	Novelty.....	C. H. Shilling.....	127	25,360	1943	Occupy.....	G. Woolf.....	126	55,635
1913	Pennant.....	C. Borel.....	119	15,060	1944	Pavot.....	G. Woolf.....	126	53,890
1914	Trojan.....	C. Burlingame.....	117	16,010	1945	Star Pilot.....	A. Kirkland.....	126	52,940
1915	Thunderer.....	J. Notter.....	122	16,590	1946	First Flight.....	E. Arcaro.....	123	73,350
1916	Campfire.....	J. McTaggart.....	125	17,340	1947	Citation.....	A. Snider.....	122	78,430
1917	Papp.....	L. Allen.....	127	15,600	1948	Blue Peter.....	E. Guerin.....	126	88,410
1918	Dunboyne.....	A. Schuttlinger.....	127	23,360	1949	Guillotine.....	T. Atkinson.....	122	87,585
1919	Man o' War.....	J. Loftus.....	127	26,650	1950	Battlefield.....	E. Arcaro.....	122	81,715
1920	Step Lightly.....	F. Keogh.....	116	35,870					

GALLANT FOX HANDICAP

Jamaica; 3-year-olds and over; 1 3/16 miles.

Distance 1½ miles prior to 1948.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1939	Isolater (6).....	J. Stout.....	119	\$ 8,400	1945	Reply Paid (3).....	H. Lindberg.....	108	39,105
1940	Selamina (3).....	D. Meade.....	107	11,150	1946	Stymie (5).....	B. James.....	126	59,050
1941	Market Wise (3).....	W. Eads.....	119	11,550	1947	Stymie (6).....	C. McCreary.....	125	56,350
1942	Dark Discovery (4).....	W. Mehrtens.....	100	11,300	1948	Faultless (4).....	H. Woodhouse.....	118	60,300
1943	Eurasian (3).....	H. Lindberg.....	116	19,700	1949	Coaltown (4).....	S. Brooks.....	130	38,600
1944	Some Chance (5).....	A. Snider.....	116	37,565	1950	Better Self (5).....	W. Boland.....	116	42,800

GRAND NATIONAL STEEPLECHASE

Belmont Park; 4-year-olds and over; about 3 miles

Run at Morris Park prior to 1905. Distance about 2½ miles prior to 1916.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1899	Trillion (8).....	Mr. W. C. Hayes..	163	\$ 6,150	1926	Erne II (5).....	R. H. Crawford...	149	\$ 6,550
1900	Philae (5).....	Donahue.....	153	6,525	1927	Jolly Roger (5)....	R. H. Crawford...	165	34,750
1901	Sacket (6).....	Carson.....	137	6,100	1928	Jolly Roger (6)....	R. H. Crawford...	167	35,850
1902	Geo. W. Jenkins (4).	Ray.....	133	5,525	1929	Arc Light (5).....	A. Bauman.....	151	34,450
1903	Plohn (6).....	Ray.....	141	6,050	1930	Tourist II (5).....	W. Hunt.....	148	28,350
1904	St. Jude (4).....	Ray.....	142	5,450	1931	Green Cheese (4)...	Mr. R. McKinney..	140	28,250
1905	Mackey Dwyer (5)...	Holman.....	149	5,210	1932	Tourist II (7).....	G. Cooper.....	158	8,200
1906	Good and Plenty (6)	Ray.....	170	5,675	1933	Best Play (4).....	A. Bauman.....	132	4,950
1907	Alfar (5).....	Owens.....	143	5,500	1934	Battleship (7).....	Mr. C. K. Bassett..	147	5,900
1908	Kara (5).....	McAfee.....	138	4,775	1935	Snap Back (6).....	W. N. Ball.....	137	6,050
1909	Sir Wooster (5).....	Davidson.....	155	740	1936	Bushranger (6)....	H. Little.....	172	5,750
1910	Rossfenton (4).....	W. Allen.....	138	1,275	1937	Sailor Beware (5)...	H. Little.....	153	9,200
1913	Penobscot (4).....	Wolke.....	140	1,845	1938	Annibal (5).....	Mr. R. McKinney..	156	8,100
1914	Relluf (7).....	T. Tuckey.....	157	1,650	1939	Whaddon Chase (4).	J. Penrod.....	146	9,300
1915	Mission (6).....	B. Haynes.....	148	1,785	1940	Cottesmore (5)....	F. Slate.....	160	14,850
1916	Hibler (7).....	T. Parrette.....	140	1,860	1941	Speculate (5).....	T. Roby.....	142	14,350
1917	Expectation (6)....	B. Haynes.....	144	1,895	1942	Cottesmore (7)....	F. Slate.....	155	13,950
1918	St. Charlcote (6)...	C. Smoot.....	158	1,755	1943	Brother Jones (7) ..	G. Walker.....	150	14,500
1919	Stonewood (7).....	V. Powers.....	148	2,150	1944	Burma Road (5)....	J. Magee.....	136	13,385
1920	Square Dealer (6)...	V. Powers.....	154	2,075	1945	Mercator (6).....	W. Owen.....	142	15,005
1921	Earlocker (5).....	W. Mahoney.....	142	3,675	1946	Elkridge (8).....	E. Roberts.....	151	21,425
1922	Lytle (8).....	R. H. Crawford ..	136	3,575	1947	Adaptable (6).....	J. Rich.....	147	20,700
1923	Sea Tale (7).....	J. Pierce.....	158	3,675	1948	American Way (6) ..	D. Marzani.....	144	22,350
1924	Dan IV (6).....	N. Kennedy.....	158	4,100	1949	His Boots (4).....	D. Marzani.....	141	15,550
1925	Moseley (5).....	C. Smoot.....	138	6,350	1950	Trough Hill (8)....	H. Harris.....	150	16,450

GRAND NATIONAL STEEPLECHASE

Liverpool, England; 6-year-olds and over; 4 miles, 856 yards (Aintree Course)

Year	Winner	Owner	Starters	Value	Year	Winner	Owner	Starters	Value
1839	Lottery.....	J. Elmore.....	17	.....	1877	Austerlitz.....	F. G. Hobson.....	16	\$ 6,450
1840	Jerry.....	Mr. Villebois.....	12	.....	1878	Shifnal.....	J. Nightingall.....	12	8,450
1841	Charity.....	Lord Craven.....	11	.....	1879	The Liberator.....	G. Moore.....	18	9,500
1842	Gaylad.....	J. Elmore.....	15	.....	1880	Empress.....	P. Ducrot.....	14	6,250
1843	Vanguard.....	Lord Chesterfield..	16	.....	1881	Woodbrook.....	Capt. Kirkwood.....	13	4,900
1844	Pioneer.....	Mr. Quartermaine..	22	.....	1882	Seaman.....	Lord Manners.....	12	6,675
1845	Cure All.....	W. S. Crawford.....	15	.....	1883	Zoedone.....	Prince C. Kinsky..	10	4,625
1846	Pioneer.....	Mr. Adams.....	22	.....	1884	Voluptuary.....	H. F. Boyd.....	15	5,175
1847	Matthew.....	Mr. Courtenay.....	26	.....	1885	Roquefort.....	A. Cooper.....	19	5,175
1848	Chandler.....	Capt. Little.....	30	.....	1886	Old Joe.....	Mr. Douglas.....	23	6,805
1849	Peter Simple.....	Mr. S. Mason, Jr....	24	\$4,025	1887	Gamecock.....	E. Jay.....	16	6,080
1850	Abd el Kader.....	Mr. Osborne.....	32	.....	1888	Playfair.....	Col. E. W. Baird ..	20	5,905
1851	Abd el Kader.....	Mr. Osborne.....	21	.....	1889	Frigate.....	M. A. Maher.....	20	6,170
1852	Miss Mowbray.....	T. F. Mason.....	24	3,400	1890	Ilex.....	G. Masterman.....	16	8,325
1853	Peter Simple.....	Capt. Little.....	21	.....	1891	Come Away.....	W. G. Jameson.....	21	8,400
1854	Bourton.....	Mr. Moseley.....	.....	.....	1892	Father O'Flynn.....	C. G. Wilson.....	25	8,400
1855	Wanderer.....	Mr. Dennis.....	20	.....	1893	Cloister.....	C. G. Duff.....	15	9,825
1856	Freertrader.....	W. Barnet.....	21	.....	1894	Why Not.....	Capt. C. H. Fenw'k.	14	9,875
1857	Emigrant.....	G. Hodgman.....	28	5,575	1895	W. M. f. Borneo ..	J. Widger.....	19	9,875
1858	Little Charley.....	C. Capel.....	16	.....	1896	The Soarer.....	Lord Wavertree.....	28	9,875
1859	Half Caste.....	Mr. Willoughby.....	20	4,200	1897	Manifesto.....	H. M. Dyas.....	28	9,875
1860	Anatis.....	C. Capel.....	19	.....	1898	Drogheda.....	C. G. Adams.....	25	9,875
1861	Jealousy.....	J. Bennett.....	24	4,925	1899	Manifesto.....	J. G. Bulteel.....	19	9,875
1862	Huntsman.....	Visc't de Namur.....	13	.....	1900	Am bush II.....	Prince of Wales.....	16	9,875
1863	Emblem.....	Lord Coventry.....	16	4,275	1901	Grudon.....	B. Bletsoe.....	24	9,875
1864	Emblematic.....	Lord Coventry.....	25	.....	1902	Shannon Lass.....	A. Gorham.....	21	10,000
1865	Alcibiade.....	B. J. Angell.....	23	5,175	1903	Drumcree.....	J. S. Morrison.....	23	10,000
1866	Salamander.....	Mr. Studd.....	30	.....	1904	Molfaa.....	G. H. Gollan.....	26	10,000
1867	Cortolvin.....	Duke of Hamilton ..	23	8,300	1905	Kirkland.....	F. Bibby.....	27	10,125
1868	The Lamb.....	Lord Poulett.....	21	7,850	1906	Asce tic's Silver ..	Prince Hatzfeldt..	23	10,875
1869	The Colonel.....	Mr. Weyman.....	22	8,800	1907	Eremon.....	S. Howard.....	23	12,000
1870	The Colonel.....	M. Evans.....	23	7,325	1908	Rubio*.....	Maj. F. Douglas- Pennant.....	24	12,000
1871	The Lamb.....	Lord Poulett.....	25	8,325	1909	Lutteur III.....	J. Hennessy.....	32	12,000
1872	Casse Tete.....	E. Brayley.....	25	7,275	1910	Jenkinstown.....	S. Howard.....	25	12,000
1873	Disturbance.....	Capt. Machell.....	28	9,800	1911	Glenside.....	F. Bibby.....	26	12,500
1874	Reign.....	Capt. Machell.....	22	9,450	1912	Jerry M.....	Mr. C. G. Assheton- Smith.....	24	16,000
1875	Patience.....	H. Bird.....	18	9,700					
1876	Reign.....	Capt. Machell.....	19	7,550					

* American bred or owned.

Grand National Steeplechase—(cont.)

Year	Winner	Owner	Starters	Value	Year	Winner	Owner	Starters	Value
1913	Covertcoat.....	Sir C. G. Assheton-Smith.....	22	\$15,850	1929	Gregalach.....	Mrs. M. A. G'm'll..	66	64,625
1914	Sunloch.....	T. Tyler.....	20	17,575	1930	Shaun Gollin.....	W. Midwood.....	41	48,650
1915	Ailly Sloper.....	Lady Nelson.....	20	17,575	1931	Grakle.....	C. R. Taylor.....	36	37,240
1916*	Bermouth.....	P. F. Heybourn.....	21	5,750	1932	Forbra.....	W. Parsonage.....	36	28,577
1917*	Ballymacad.....	Sir G. Bullough.....	19	6,025	1933	Kellsboro Jack†.....	Mrs. F. A. Clark.....	34	36,725
1918*	Poethlyn.....	Mrs. H. Peel.....	17	4,925	1934	Golden Miller.....	Miss D. Paget.....	30	36,325
1919*	Poethlyn.....	Mrs. H. Peel.....	22	17,950	1935	Reynoldstown.....	Maj. Noel Frlong.....	27	32,721
1920	Troytown.....	Major Gerrard.....	24	21,800	1936	Reynoldstown.....	Maj. Noel Frlong.....	35	35,100
1921	Shaun Spadah.....	T. McAlpine.....	35	39,925	1937	Royal Mail.....	H. Lloyd Thomas.....	33	33,225
1922	Music Hall.....	Hugh Kershaw.....	32	35,000	1938	Battleship†.....	Mrs. M. Scott.....	36	37,545
1923	Sgt. Murphy.....	Stephen Sanford.....	28	36,100	1939	Workman.....	Sir A. Maguire.....	37	31,966
1924	Master Rob't.....	Lord Airlie.....	30	40,825	1940	Bogskar.....	Lord Stalbridge.....	30	16,887
1925	Double Chance.....	Major D. Gould.....	33	40,600	1946	Lovely Cottage.....	Jock Morant.....	34	35,300
1926	Jack Horner.....	C. Schwartz.....	30	31,550	1947	Caughoo.....	J. J. McDowell.....	57	39,728
1927	Sprig.....	Mrs. M. Partridge.....	37	41,075	1948	Sheila's Cottage.....	John Proctor.....	43	36,428
1928	Tipperary Tim.....	H. S. Kenyon.....	42	55,900	1949	Russian Hero.....	W. F. Williamson.....	43	37,968
					1950	Freebooter.....	Mrs. L. Brotherton.....	49	28,000

* Substitute race. † American bred or owned.

HOLLYWOOD GOLD CUP

Hollywood Park; 3-year-olds and over; 1¼ miles.

Run at Santa Anita Park in 1949.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1938	Seabiscuit (5).....	G. Woolf.....	133	\$37,150	1945	Challenge Me (4).....	A. Skoronski.....	108	48,230
1939	Kayak II (4).....	G. Woolf.....	125	35,075	1946	Triplecups (5).....	B. James.....	113	79,900
1940	Challedon (4).....	G. Woolf.....	133	36,200	1947	Cover Up (4).....	R. Permane.....	117	73,500
1941	Big Pebble (5).....	J. Westrope.....	119	62,475	1948	Shannon II (7).....	J. Adams.....	116	67,600
1944	Happy Issue (4).....	H. Woodhouse.....	119	60,600	1949	Solidarity (4).....	R. Neves.....	115	100,000

HOPEFUL STAKES

Saratoga; 2-year-olds; 6½ furlongs.

Distance ¼ mile prior to 1925; run at Belmont Park 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1903	Delhi.....	C. Gannon.....	112	\$22,275	1928	Jack High.....	G. Ellis.....	127	54,100
1904	Tanya.....	E. Hildebrand.....	127	29,790	1929	Boojum.....	R. Workman.....	117	54,750
1905	Mohawk II.....	A. Redfern.....	130	16,490	1930	Epithet.....	W. Kelsay.....	117	55,000
1906	Peter Pan.....	W. Knapp.....	130	17,640	1931	Tick On.....	P. Walls.....	117	45,950
1907	Jim Gaffney.....	D. Nicol.....	115	17,500	1932	Ladysman.....	R. Jones.....	130	41,400
1908	Helmet.....	J. Notter.....	115	10,990	1933	Bazaar.....	D. Meade.....	119	33,550
1909	Rocky O'Brien.....	V. Powers.....	122	17,160	1934	Psychic Bid.....	M. Garner.....	122	24,250
1910	Novelty.....	A. Thomas.....	130	19,140	1935	Red Rain.....	R. Workman.....	124	38,400
1913	Bringhurst.....	J. Loftus.....	113	4,100	1936	Maedic.....	E. Litzenberger.....	122	32,600
1914	Regret.....	J. Notter.....	127	9,590	1937	Sky Larking.....	A. Robertson.....	119	31,450
1915	Dominant.....	J. Notter.....	130	9,150	1938	El Chico.....	N. Wall.....	126	42,550
1916	Campfire.....	J. McTaggart.....	130	18,850	1939	Bimelech.....	F. A. Smith.....	122	33,750
1917	Sun Briar.....	W. Knapp.....	130	30,600	1940	Whirlaway.....	J. Longden.....	122	37,850
1918	Eternal.....	A. Schuttinger.....	115	30,150	1941	Devil Diver.....	J. Skelly.....	119	35,950
1919	Man o' War.....	J. Loftus.....	130	24,600	1942	Devil's Thumb.....	C. McCreary.....	122	31,750
1920	Leonardo II.....	A. Schuttinger.....	115	33,850	1943	Bee Mac.....	S. Young.....	119	33,300
1921	Morvich.....	A. Johnson.....	130	34,900	1944	Pavot.....	G. Woolf.....	126	51,775
1922	Dunlin.....	C. Kummer.....	115	38,950	1945	Star Pilot.....	A. Kirkland.....	112	55,195
1923	Diogenes.....	C. Ponce.....	115	46,800	1946	Blue Border.....	A. DeLara.....	122	46,450
1924	Master Charlie.....	G. Babin.....	130	48,700	1947	Relic.....	J. Adams.....	114	48,200
1925	Pompey.....	L. Fator.....	127	42,850	1948	Blue Peter.....	E. Guerin.....	126	47,753
1926	Lord Chaucer.....	F. Coltilletti.....	115	48,850	1949	Middleground.....	D. Gorman.....	114	44,050
1927	Brooms.....	J. Maiben.....	115	55,750	1950	Battlefield.....	E. Guerin.....	122	47,550

New York Wagering, Attendance Records

Type of record	Amount	Track	Date
Mutuel handle (8 races).....	\$5,016,745.....	Belmont.....	September 22, 1945
Mutuel handle (7 races).....	4,330,471.....	Jamaica*.....	November 3, 1945
Mutuel handle (1 race).....	763,127.....	Belmont.....	September 27, 1945
Daily double.....	251,682.....	Jamaica.....	October 30, 1945
Attendance.....	64,670.....	Jamaica.....	May 30, 1945

* Empire City meeting.

KENTUCKY DERBY

Churchill Downs; 3-year-olds; 1¼ miles

Distance 1¼ miles prior to 1896.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1875	Aristides.....	O. Lewis.....	100	\$2,850	1913	Donerail.....	R. Goose.....	117	\$ 5,475
1876	Vagrant.....	R. Swim.....	97	2,950	1914	Old Rosebud.....	J. McCabe.....	114	9,125
1877	Baden Baden.....	W. Walker.....	100	3,300	1915	Regret.....	J. Notter.....	112	11,450
1878	Day Star.....	J. Carter.....	100	4,050	1916	George Smith.....	J. Loftus.....	117	9,750
1879	Lord Murphy.....	C. Schauer.....	100	3,550	1917	Omar Khayyam.....	C. Borel.....	117	16,600
1880	Fonso.....	G. Lewis.....	105	3,800	1918	Exterminator.....	W. Knapp.....	114	14,700
1881	Hindoo.....	J. McLaughlin.....	105	4,410	1919	Sir Barton.....	J. Loftus.....	112½	20,825
1882	Apollo.....	B. Hurd.....	102	4,560	1920	Paul Jones.....	T. Rice.....	126	30,375
1883	Leonatus.....	W. Donohue.....	105	3,760	1921	Behave Yourself.....	C. Thompson.....	126	38,450
1884	Buchanan.....	I. Murphy.....	110	3,990	1922	Morris.....	A. Johnson.....	126	46,775
1885	Joe Cotton.....	E. Henderson.....	110	4,630	1923	Zev.....	E. Sande.....	126	53,600
1886	Ben Ali.....	P. Duffy.....	118	4,890	1924	Black Gold.....	J. D. Mooney.....	126	52,775
1887	Montrose.....	I. Lewis.....	118	4,200	1925	Flying Ebony.....	E. Sande.....	126	52,950
1888	Macbeth II.....	G. Covington.....	115	4,740	1926	Bubbling Over.....	A. Johnson.....	126	50,075
1889	Spokane.....	T. Kiley.....	118	4,970	1927	Whiskery.....	L. McAtee.....	126	51,000
1890	Riley.....	I. Murphy.....	118	5,460	1928	Reigh Count.....	C. Lang.....	126	55,375
1891	Kingman.....	I. Murphy.....	122	4,680	1929	Clyde Van Dusen.....	L. McAtee.....	126	53,950
1892	Azra.....	A. Clayton.....	122	4,230	1930	Gallant Fox.....	E. Sande.....	126	50,725
1893	Lookout.....	E. Kunze.....	122	4,090	1931	Twenty Grand.....	C. Kurtzinger.....	126	48,725
1894	Chant.....	F. Goodale.....	122	4,020	1932	Burgoo King.....	E. James.....	126	52,350
1895	Halma.....	J. Perkins.....	122	2,970	1933	Brokers Tip.....	D. Meade.....	126	48,925
1896	Ben Brush.....	W. Simms.....	117	4,850	1934	Cavalcade.....	M. Garner.....	126	28,175
1897	Typhoon II.....	F. Garner.....	117	4,850	1935	Omaha.....	W. Saunders.....	126	39,525
1898	Plaudit.....	W. Simms.....	117	4,850	1936	Bold Venture.....	I. Hanford.....	126	37,725
1899	Manuel.....	F. Taral.....	117	4,850	1937	War Admiral.....	C. Kurtzinger.....	126	52,050
1900	Lieut. Gibson.....	J. Boland.....	117	4,850	1938	Lawrin.....	E. Arcaro.....	126	47,050
1901	His Eminence.....	J. Winkfield.....	117	4,850	1939	Johnstown.....	J. Stout.....	126	46,350
1902	Alan-a-Dale.....	J. Winkfield.....	117	4,850	1940	Gallahadion.....	C. Bierman.....	126	60,150
1903	Judge Himes.....	H. Booker.....	117	4,850	1941	Whirlaway.....	E. Arcaro.....	126	61,275
1904	Elwood.....	F. Prior.....	117	4,850	1942	Shut Out.....	W. D. Wright.....	126	64,225
1905	Agile.....	J. Martin.....	122	4,850	1943	Count Fleet.....	J. Longden.....	126	60,725
1906	Sir Huon.....	R. Troxler.....	117	4,850	1944	Pensive.....	C. McCreary.....	126	64,675
1907	Pink Star.....	A. Minder.....	117	4,850	1945	Hoop Jr.....	E. Arcaro.....	126	64,850
1908	Stone Street.....	A. Pickens.....	117	4,850	1946	Assault.....	W. Mehrtens.....	126	96,400
1909	Wintergreen.....	V. Powers.....	117	4,850	1947	Jet Pilot.....	E. Guerin.....	126	92,160
1910	Donau.....	F. Herbert.....	117	4,850	1948	Citation.....	E. Arcaro.....	126	83,400
1911	Meridian.....	G. Archibald.....	117	4,850	1949	Ponder.....	S. Brooks.....	126	91,600
1912	Worth.....	C. H. Shilling.....	117	4,850	1950	Middleground.....	W. Boland.....	126	92,650

MASSACHUSETTS HANDICAP

Suffolk Downs; 3-year-olds and over; 1¼ miles.

Distance 1¼ miles prior to 1943.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Top Row (4).....	G. Woolf.....	116	\$18,750	1943	Market Wise (5).....	V. Nodarse.....	126	\$39,650
1936	Time Supply (5).....	R. Workman.....	121	23,500	1944	First Fiddle (5).....	J. Longden.....	124	41,850
1937	Seabiscuit (4).....	J. Pollard.....	130	51,780	1945	First Fiddle (6).....	J. Longden.....	121	42,750
1938	Menow (3).....	N. Wall.....	107	40,550	1946	Pavot (4).....	A. Kirkland.....	120	47,750
1939	Fighting Fox (4).....	J. Stout.....	113	49,250	1947	Tymie (6).....	C. McCreary.....	128	41,150
1940	Eight Thirty (4).....	H. Richards.....	126	46,550	1948	Beauchef (5).....	R. Donoso.....	115	47,250
1941	War Relic (3).....	T. Atkinson.....	102	48,350	1949	First Nighter (4).....	J. Renick.....	104	39,200
1942	Whirlaway (4).....	G. Woolf.....	130	43,850	1950	Cochise (4).....	E. Arcaro.....	120	21,400

NARRAGANSETT SPECIAL

Narragansett Park; 3-year-olds and over; 1 3/16 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1934	Time Supply (3).....	T. Luther.....	120	\$28,000	1942	Whirlaway (4).....	G. Woolf.....	130	24,300
1935	Top Row (4).....	W. D. Wright.....	110	25,700	1943	Market Wise (5).....	J. Longden.....	124	25,300
1936	Rosemont (4).....	H. Richards.....	121	32,100	1944	Parbey (6).....	W. Mehrtens.....	110	23,150
1937	Calumet Dick (5).....	H. Dabson.....	115	28,200	1945	Westminster (4).....	W. Garner.....	110	20,400
1938	Stagehand (3).....	J. Westrope.....	119	26,300	1946	Lucky Draw (5).....	C. McCreary.....	123	27,950
1939	Chalcedon (3).....	H. Richards.....	118	24,600	1948	Donor (4).....	A. Kirkland.....	110	20,750
1940	Hash (4).....	E. Arcaro.....	122	24,600	1949	Donor (5).....	W. Mehrtens.....	118	19,400
1941	War Relic (3).....	T. Atkinson.....	102	22,400	1950	De Luxe (4).....	E. Rodriguez.....	110	20,550

PREAKNESS STAKES

Pimlico; 3-year-olds; 1 3/16 miles

Distance 1 1/4 miles prior to 1889; 1 1/4 miles in 1889; 1 1/16 miles 1894 to 1900, inclusive, and 1908; 1 mile and 70 yards from 1901 to 1907, inclusive; 1 mile in 1909 and 1910; 1 1/4 miles from 1911 to 1924, inclusive. Run at Brooklyn Jockey Club's Gravesend Course from 1894 to 1908, inclusive. Run in two divisions in 1918.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1873	Survivor	G. Barbee	110	.....	1915	Rhine Maiden	D. Hoffman	104	\$1,275
1874	Culpepper	M. Donohue	110	.....	1916	Damrosch	L. McAtee	115	1,380
1875	Tom Ochiltree	L. Hughes	110	.....	1917	Kalitan	E. Haynes	116	4,800
1876	Shirley	G. Barbee	110	.....	1918	War Cloud	J. Loftus	117	12,250
1877	Cloverbrook	C. Holloway	110	.....	1918	Jack Hare Jr.	C. Peak	115	11,250
1878	Duke of Magenta	C. Holloway	110	.....	1919	Sir Barton	J. Loftus	126	24,500
1879	Harold	W. Hughes	110	\$2,550	1920	Man o' War	C. Kummer	126	23,000
1880	Grenada	W. Hughes	110	2,000	1921	Broomspun	F. Coltletti	114	43,000
1881	Sauterter	W. Costello	110	1,950	1922	Pillory	L. Morris	114	51,000
1882	Vanguard	W. Costello	110	1,250	1923	Vigil	B. Marinelli	114	52,000
1883	Jacobus	G. Barbee	110	1,635	1924	Nellie Morse	J. Merimee	121	54,000
1884	Knight of Ellerslie	S. H. Fisher	110	1,905	1925	Coventry	C. Kummer	126	52,700
1885	Tecumseh	J. McLaughlin	118	2,160	1926	Display	J. Maiben	126	53,625
1886	The Bard	S. H. Fisher	118	2,050	1927	Bostonian	A. Abel	126	53,100
1887	Dunboyne	W. Donohue	118	1,675	1928	Victorian	R. Workman	126	60,000
1888	Refund	F. Littlefield	118	1,185	1929	Dr. Freeland	L. Schaefer	126	52,325
1889	Buddhist	H. Anderson	118	1,130	1930	Gallant Fox	E. Sande	126	51,925
1894	Assignee	F. Taral	122	1,830	1931	Mate	G. Ellis	126	48,225
1895	Belmar	F. Taral	115	1,350	1932	Burgoo King	E. James	126	50,375
1896	Margrave	H. Griffin	115	1,350	1933	Head Play	C. Kurtsinger	126	26,850
1897	Paul Kauvar	Thorpe	108	1,420	1934	High Quest	R. Jones	126	25,175
1898	Sly Fox	W. Simms	120	1,450	1935	Omaha	W. Saunders	126	25,325
1899	Half Time	R. Clawson	104	1,580	1936	Bold Venture	G. Woolf	126	27,325
1900	Hindus	H. Spencer	106	1,900	1937	War Admiral	C. Kurtsinger	126	45,600
1901	The Parader	Landry	118	1,605	1938	Dauber	M. Peters	126	51,857
1902	Old England	L. Jackson	115	2,240	1939	Challedon	G. Seabo	126	53,710
1903	Flocarlina	W. Gannon	113	1,875	1940	Bimelech	F. A. Smith	126	53,230
1904	Bryn Mawr	E. Hildebrand	108	2,355	1941	Whirlaway	E. Arcaro	126	49,365
1905	Cairngorm	W. Davis	114	2,145	1942	Alsab	B. James	126	58,175
1906	Whimsical	W. Miller	108	2,355	1943	Count Fleet	J. Longden	126	43,190
1907	Don Enrique	G. Mountain	107	2,260	1944	Pensive	C. McCreary	126	60,075
1908	Royal Tourist	E. Dugan	112	2,455	1945	Polynesian	W. D. Wright	126	66,170
1909	Effendi	W. Doyle	116	3,225	1946	Assault	W. Mehrtens	126	96,620
1910	Layminster	R. Estep	84	3,300	1947	Faultless	D. Dodson	126	98,005
1911	Watervale	E. Dugan	112	2,700	1948	Citation	E. Arcaro	126	91,870
1912	Colonel Holloway	C. Turner	107	1,450	1949	Capot	T. Atkinson	126	79,985
1913	Buskin	J. Butwell	117	1,670	1950	Hill Prince	E. Arcaro	126	56,115
1914	Holiday	A. Schuttlinger	108	1,355					

PIMLICO FUTURITY

Pimlico; 2-year-olds; 1 1/16 miles.

Run in two divisions in 1922. Distance 1 mile prior to 1929.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1921	Morvich	A. Johnson	122	\$42,750	1937	Nedayr	W. D. Wright	122	\$28,140
1922	Blossom Time	A. Johnson	119	41,015	1938	Challedon	G. Seabo	119	28,770
1922	Sally's Alley	A. Johnson	116	41,015	1939	Bimelech	F. A. Smith	122	33,230
1923	Beau Butler	G. W. Carroll	122	54,030	1940	Bold Irishman	J. Gilbert	122	33,830
1924	Stimulus	H. Thurber	122	49,220	1941	Contradiction	K. McCombs	122	33,910
1925	Canter	C. Turner	117	53,350	1942	Count Fleet	J. Longden	119	30,820
1926	Fair Star	O. Bourassa	119	59,660	1943	Platter	C. McCreary	119	33,440
1927	Glade	L. Morris	114	53,310	1944	Pot o' Luck	D. Dodson	122	35,130
1928	High Strung	L. McAtee	122	50,750	1945	Star Pilot	A. Kirkland	122	36,365
1929	Flying Heels	W. Kelsay	117	55,810	1946	Jet Pilot	J. Gilbert	122	37,615
1930	Equipoise	R. Workman	119	50,360	1947	Citation	D. Dodson	119	36,675
1931	Top Flight	R. Workman	119	56,170	1948	Capot	T. Atkinson	119	47,325
1932	Swivel	J. Gilbert	116	62,430	1949	Oil Capital	E. J. Knapp	122	48,755
1935	Hollywood	S. Coucci	122	45,850	1950	Big Stretch	T. Atkinson	122	45,090
1936	Matey	H. Richards	119	25,300					

Temple Gwathmey to Tourist List

Tourist List, owned by Lowry Watkins of Louisville, Ky., became a double winner of the Temple Gwathmey Steeplechase when he

won the 1950 running of the feature event of the annual two-day program of the United Hunts Racing Association at Belmont Park last October. The 9-year-old gelding's first victory came in 1947.

PIMLICO SPECIAL

Pimlico; 3-year-olds and over; 1 3/16 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1937	War Admiral (3).....	C. Kutsinger.....	128	\$ 5,680	1944	Twilight Tear (3)....	D. Dodson.....	117	\$25,000
1938	Seabiscuit (5).....	G. Woolf.....	120	15,000	1945	Armed (4).....	D. Dodson.....	126	25,000
1939	Challedon (3).....	E. Arcaro.....	120	10,000	1946	Assault (3).....	E. Arcaro.....	120	25,000
1940	Challedon (4).....	G. Woolf.....	126	10,000	1947	Fervent (3).....	A. Snider.....	120	25,000
1941	Market Wise (3).....	W. Eads.....	120	10,000	1948*	Citation (3).....	E. Arcaro.....	120	10,000
1942*	Whirlaway (4).....	G. Woolf.....	126	10,000	1949	Capot (3).....	T. Atkinson.....	120	15,000
1943	Shut Out (4).....	E. Arcaro.....	126	25,000	1950	One Hitter (4).....	T. Atkinson.....	126	15,000

* Walkover.

SANTA ANITA DERBY

Santa Anita Park; 3-year-olds; 1 1/8 miles

Distance 1 1/8 miles prior to 1938; 1 1/4 miles in 1947.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1935	Gilte.....	S. Coucci.....	126	\$19,650	1945	Bymeabond.....	G. Woolf.....	119	\$37,250
1936	He Did.....	W. D. Wright.....	126	26,000	1946	Knockdown.....	R. Permane.....	122	74,680
1937	Fairy Hill.....	M. Peters.....	121	45,425	1947	On Trust.....	J. Longden.....	118	81,750
1938	Stagehand.....	J. Westrope.....	118	42,350	1948	Salmagundi.....	J. Longden.....	118	79,800
1939	Ciencia.....	C. Bierman.....	115	41,850	1949	Old Rockport.....	G. Glisson.....	118	94,700
1940	Sweepida.....	R. Neves.....	120	43,850	1950	Your Host.....	J. Longden.....	118	89,800
1941	Porter's Cap.....	L. Haas.....	120	44,975					

SANTA ANITA HANDICAP

Santa Anita Park; 3-year-olds and over; 1 1/4 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Azucar (7).....	G. Woolf.....	117	\$108,400	1945	Thumbs Up (6).....	J. Longden.....	130	\$82,925
1936	Top Row (5).....	W. D. Wright.....	116	104,600	1946	War Knight (6).....	J. Adams.....	115	101,220
1937	Rosemont (5).....	H. Richards.....	124	90,700	1947	Olhaverly (8).....	M. Peterson.....	116	98,900
1938	Stagehand (3).....	N. Wall.....	100	91,450	1948	Talon (6).....	E. Arcaro.....	122	102,500
1939	Kayak II (4).....	J. Adams.....	110	91,100	1949	Vulcan's Forge (4)....	D. Gorman.....	119	102,000
1940	Seabiscuit (7).....	J. Pollard.....	130	86,650	1950	Noor (5).....	J. Longden.....	110	97,900
1941	Bay View (4).....	N. Wall.....	108	89,360					

SUBURBAN HANDICAP

Belmont Park; 3-year-olds and over; 1 1/4 miles.

Run at Sheepshead Bay prior to 1913.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1884	Gen. Monroe (6).....	W. Donohue.....	124	\$ 4,945	1919	Corn Tassel (5).....	L. Ensor.....	108	\$ 5,200
1885	Pontiac (4).....	H. Olney.....	102	5,855	1920	Paul Jones (3).....	A. Schuttlinger.....	106	6,350
1886	Troubadour (4).....	W. Fitzpatrick.....	115	5,697	1921	Audacious (5).....	C. Kummer.....	120	8,100
1887	Eurus (4).....	G. Davis.....	102	6,065	1922	Captain Alcock (5)....	C. Ponce.....	108	8,200
1888	Elkwood (5).....	W. Martin.....	119	6,812	1923	Grey Lag (5).....	E. Sande.....	135	7,800
1889	Raceland (4).....	E. Garrison.....	120	6,900	1924	Mad Hatter (8).....	E. Sande.....	125	9,150
1890	Salvator (4).....	I. Murphy.....	127	6,900	1925	Sting (4).....	B. Bruening.....	122	11,600
1891	Loantaka (5).....	M. Bergen.....	110	9,900	1926	Crusader (3).....	J. Callahan.....	104	13,150
1892	Montana (4).....	E. Garrison.....	115	17,750	1927	Crusader (4).....	C. Kummer.....	127	11,875
1893	Lowlander (5).....	P. McDermott.....	105	17,750	1928	Dolan (4).....	J. Callahan.....	105	13,875
1894	Ramapo (4).....	F. Taral.....	120	12,070	1929	Bateau (4).....	E. Ambrose.....	112	14,100
1895	Lazzarone (4).....	A. Hamilton.....	115	4,730	1930	Petee Wrack (5).....	E. Sande.....	122	11,850
1896	Henry of Navarre (5)...	H. Griffin.....	129	5,850	1931	Mokamat (4).....	A. Robertson.....	123	11,200
1897	Ben Brush (4).....	W. Simms.....	123	5,850	1932	White Clover II (6)...	R. Workman.....	115	11,100
1898	Tillo (4).....	A. Clayton.....	119	6,800	1933	Equipoise (5).....	R. Workman.....	132	7,250
1899	Imp (5).....	N. Turner.....	114	6,800	1934	Ladysman (4).....	S. Coucci.....	114	5,750
1900	Kinley Mack (4).....	P. McCue.....	125	6,800	1935	Head Play (5).....	C. Kutsinger.....	114	12,175
1901	Alcedo (4).....	H. Spencer.....	112	7,800	1936	Fierthorn (4).....	H. Richards.....	116	12,125
1902	Gold Heels (4).....	O. Wonderly.....	124	7,800	1937	Aneroid (4).....	C. Rosengarten.....	110	10,950
1903	Africander (3).....	G. Fuller.....	110	16,490	1938	Snark (5).....	J. Longden.....	120	17,050
1904	Hermis (5).....	A. Redfern.....	127	16,800	1939	Cravat (4).....	J. Westrope.....	121	17,750
1905	Beldame (4).....	F. O'Neill.....	123	16,800	1940	Eight Thirty (4).....	H. Richards.....	127	19,850
1906	Go Between (5).....	W. Shaw.....	116	16,800	1941	Your Chance (4).....	D. Meade.....	114	25,200
1907	Nealon (4).....	W. Dugan.....	113	16,800	1942	Market Wise (4).....	B. James.....	124	27,800
1908	Ballot (4).....	J. Notter.....	127	19,750	1943	Don Bingo (4).....	J. Renick.....	104	27,600
1909	Fitz Herbert (3).....	E. Dugan.....	105	3,850	1944	Aletern (5).....	H. Lindberg.....	108	33,210
1910	Olambala (4).....	G. Archibald.....	115	4,800	1945	Devil Diver (5).....	E. Arcaro.....	132	34,995
1913	Whisk Broom II (6)....	J. Notter.....	139	3,000	1946	Armed (5).....	D. Dodson.....	130	43,000
1915	Stromboli (4).....	C. Turner.....	122	3,925	1947	Assault (4).....	E. Arcaro.....	130	40,000
1916	Friar Rock (3).....	M. Garner.....	101	3,450	1948	Harmonic (4).....	W. Mehrtens.....	109	39,700
1917	Boots (3).....	J. Loftus.....	122	4,900	1949	Vulcan's Forge (4)....	E. Arcaro.....	124	43,200
1918	Johren (3).....	F. Robinson.....	110	5,850	1950	Losier Weeper (5)....	N. Combest.....	115	41,300

TRAVERS STAKES

Saratoga; 3-year-olds; 1 1/4 miles.

Distance 1 1/4 miles prior to 1890; 1 1/2 miles in 1890, 1891, and 1892; 1 1/4 miles in 1893, 1894 and 1897; 1 1/2 miles in 1895, 1901, 1902, and 1903. Run as Travers Midsummer Derby from 1927 to 1932, inclusive, Run at Belmont Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1864	Kentucky	Gilpatrick	100	\$2,950	1909	Hilarious	Scoville	129	5,800
1865	Malden	Sewell	97	3,400	1910	Dalmatian	C. H. Shilling	129	4,825
1866	Morrill	Abe	100	3,500	1913	Rock View	T. McTaggart	129	2,725
1867	Ruthless	Gilpatrick	103	2,850	1914	Roamer	J. Butwell	123	3,000
1868	The Banshee	Smith	97	3,150	1915	Lady Rotha	M. Garner	106	2,150
1869	Glenelg	C. Miller	110	3,000	1916	Spur	J. Loftus	129	3,125
1870	Kingfisher	C. Miller	110	4,950	1917	Omar Khayyam	J. Butwell	129	5,350
1871	Harry Bassett	W. Miller	110	5,600	1918	Sun Briar	W. Knapp	120	7,700
1872	Joe Daniels	J. Rowe	110	5,500	1919	Hannibal	L. Ensor	120	9,835
1873	Tom Bowling	R. Swim	110	5,400	1920	Man o' War	A. Schuttinger	129	9,275
1874	Attila	Barbee	110	5,050	1921	Sporting Blood	L. Lyke	116	10,275
1875	D'Artagnan	Barbee	110	4,850	1922	Little Chief	L. Fator	123	11,325
1876	Sultana	Hayward	107	3,700	1923	Wilderness	B. Marinelli	120	13,550
1877	Baden Baden	Sayers	110	4,550	1924	Sun Flag	F. Keogh	115	14,675
1878	Duke of Magenta	Hughes	118	4,250	1925	Dangerous	C. Kummer	115	13,425
1879	Falsetto	I. Murphy	118	4,950	1926	Mars	F. Coltilet	123	15,050
1880	Grenada	Hughes	118	3,750	1927	Brown Bud	L. Fator	120	29,925
1881	Hindoo	J. McLaughlin	118	2,950	1928	Petee-Wrack	S. O'Donnell	117	30,550
1882	Carley B.	Quantrell	115	3,450	1929	Beacon Hill	A. Robertson	117	31,820
1883	Barnes	J. McLaughlin	118	3,400	1930	Jim Dandy	F. J. Baker	120	27,050
1884	Rataplan	Fitzpatrick	118	\$4,150	1931	Twenty Grand	L. McAtee	126	33,000
1885	Bersan	Spellman	118	4,025	1932	War Hero	J. Gilbert	115	23,150
1886	Inspector B.	J. McLaughlin	118	3,825	1933	Inlander	R. Jones	126	21,050
1887	Carey	Blaylock	118	3,825	1934	Observant	L. Humphries	112	14,650
1888	Sir Dixon	J. McLaughlin	118	4,625	1935	Gold Foam	S. Coucci	112	14,675
1889	Long Dance	Barnes	118	3,700	1936	Granville	J. Stout	127	14,700
1890	Sir John	Bergen	118	4,925	1937	Burning Star	W. D. Wright	117	14,550
1891	Vallera	R. Williams	122	2,900	1938	Thanksgiving	E. Arcaro	117	14,400
1892	Azra	Clayton	122	2,750	1939	Eight Thirty	H. Richards	117	16,575
1893	Stowaway	McDermott	107	2,450	1940	Fenelon	J. Stout	122	17,425
1894	Henry of Navarre	Taral	125	2,350	1941	Whirlaway	A. Robertson	130	16,900
1895	Liza	Griffin	104	1,125	1942	Shut Out	E. Arcaro	130	17,825
1897	Rensselaer	Taral	126	1,425	1943	Eurasian	S. Brooks	112	19,850
1901	Blues	Shaw	126	6,750	1944	By Jimminy	E. Arcaro	126	25,015
1902	Hermis	Rice	111	6,750	1945	Adonis	C. McCreary	110	28,680
1903	Ada Nay	F. O'Neill	106	8,150	1946	Natchez	T. Atkinson	124	24,750
1904	Broomstick	T. Burns	129	5,850	1947	Young Peter	T. May	124	19,375
1905	Dandelion	Shaw	111	8,350	1948	Ace Admiral	T. Atkinson	108	19,650
1906	Gallavant	W. Miller	111	5,800	1949	Arise	C. Errico	108	16,000
1907	Karl Gill	Notter	129	5,800	1950	Lights Up	G. Hettinger	110	16,350
1908	Doranto	J. Lee	116	5,800					

WASHINGTON PARK FUTURITY

Washington Park; 2-year-olds; 3/4 mile.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1937	Tiger	A. Robertson	117	\$26,135	1945	Revoked	A. Bodilo	118	56,700
1940	Porter's Cap	C. Bierman	117	30,780	1946	Education	J. Adams	118	65,125
1941	Alsab	R. L. Vedder	119	32,575	1947	Bewitch	D. Dodson	119	63,150
1942	Occupation	L. Balaski	122	58,475	1948	Model Cadet	A. Skoronski	118	60,750
1943	Occupyp	L. Whiting	113	43,625	1949	Curlice	O. Scurlock	115	57,890
1944	Free for All	O. Grohs	122	47,850	1950	To Market	A. Rivera	122	57,390

WIDENER

Hialeah Park; 3-year-olds and over; 1 1/4 miles

Run as Widener Challenge Cup Handicap prior to 1938.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1936	Mantagna (4)	E. Litzenberger	109	\$10,150	1944	Four Freedoms (4)	E. Arcaro	109 1/2	29,350
1937	Columbiana (4)	H. Le Blanc	103	52,000	1946	Armed (5)	D. Dodson	128	45,700
1938	War Admiral (4)	C. Kurtzinger	130	49,550	1947	Armed (6)	D. Dodson	129	43,900
1939	Bull Lea (4)	I. Anderson	119	46,450	1948	El Mono (4)	P. Roberts	112	43,800
1940	Many Stings (5)	R. Donoso	109	52,000	1949	Coaltown (4)	T. Atkinson	123	42,300
1941	Big Pebble (5)	G. Seabo	109	51,800	1950	Royal Governor (6)	C. Rogers	118	43,000
1942	The Rhymer (4)	E. Arcaro	111	53,950					

WOOD MEMORIAL

Jamaica; 3-year-olds; 1 1/16 miles

Run as Wood Stakes prior to 1927. Distance 1 mile and 70 yards from 1925 to 1939, inclusive. Run as Wood Memorial Stakes from 1927 to 1941, inclusive. Run in two divisions in 1944, 1945, and 1947.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1925	Backbone.....	I. Parke.....	110	\$ 7,600	1940	Dit.....	L. Haas.....	220	19,225
1926	Pompey.....	B. Brauning.....	120	8,700	1941	Market Wise.....	D. Meade.....	120	16,650
1927	Saxon.....	G. Ellis.....	117	9,050	1942	Requested.....	W. D. Wright.....	120	22,900
1928	Distraction.....	D. McAuliffe.....	120	11,300	1943	Count Fleet.....	J. Longden.....	126	20,150
1929	Essare.....	M. Garner.....	110	11,000	1944	Stir Up.....	E. Arcaro.....	126	19,625
1930	Gallant Fox.....	E. Sande.....	120	10,150	1944	Lucky Draw.....	J. Longden.....	126	20,115
1931	Twenty Grand.....	C. Kurtsinger.....	120	10,200	1945	Jeep.....	A. Kirkland.....	126	18,945
1932	Universe.....	L. McAtee.....	120	10,400	1945	Hoop Jr.....	E. Arcaro.....	126	18,945
1933	Mr. Khayyam.....	P. Walls.....	122	3,760	1946	Assault.....	W. Mehrtens.....	126	22,600
1934	High Quest.....	D. Bellizzi.....	120	3,990	1947	Phalanx.....	E. Arcaro.....	126	31,325
1935	Today.....	R. Workman.....	112	11,350	1947	I Will.....	E. Arcaro.....	126	31,625
1936	Teufel.....	E. Litzenberger.....	112	10,775	1948	My Request.....	D. Dodson.....	126	34,600
1937	Melodist.....	J. Longden.....	120	19,105	1949	Olympia.....	E. Arcaro.....	126	31,850
1938	Fighting Fox.....	J. Stout.....	120	17,450	1950	Hill Prince.....	E. Arcaro.....	126	34,500
1939	Johnstown.....	J. Stout.....	120	17,675					

Facts on Citation

Bred and owned by Calumet Farm. Trained by H. A. (Jimmy) Jones. Bay horse by Bull Lea-Hydroplane II.

Record by Years

(Citation did not race in 1949)

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1947.....	2	8	1	0	0	0	\$155,680
1948.....	3	20	19	1	0	0	709,470
1950.....	5	9	2	7	0	0	73,480
		38	29	9	0	0	\$938,630

Stake Victories

1947

Date	Event	Dist.	Wt.	Time	Earnings
July 30	Elementary Stakes.....	¼	122	1:10½	\$17,300
Sept. 30	Futurity Trial.....	¼	116	1:11	6,500
Oct. 4	Belmont Futurity.....	6½	122	1:15½	78,430
Nov. 8	Pimlico Futurity.....	1½	119	1:48½	36,675

1948

Feb. 11	Seminole Handicap.....	¾	112	1:23	8,525
Feb. 18	Everglades Handicap.....	1½	126	1:49	7,200
Feb. 28	Flamingo Stakes.....	1½	126	1:48½	43,500
Apr. 17	Chesapeake Stakes.....	1½	122	1:45½	19,750
Apr. 27	Derby Trial.....	1	118	1:37½	8,525
May 1	Kentucky Derby.....	1½	126	2:05½	83,400
May 15	Preakness Stakes.....	1½	126	2:02½	91,870
May 29	Jersey Stakes.....	1½	126	2:03	43,300
June 12	Belmont Stakes.....	1½	126	2:28½	77,700
July 5	Stars and Stripes.....	1½	119	1:49½	38,000
Aug. 28	American Derby.....	1½	126	2:01½	66,450
Sept. 29	Sonnyboy Mile.....	1	119	1:36	20,200
Oct. 2	Jockey Club Gold Cup.....	2	117	3:21½	72,700
Oct. 16	Empire City Gold Cup.....	1½	119	2:42½	75,600
Oct. 29	*Pimlico Special.....	1½	120	1:59½	10,000
Dec. 11	Tanforan Handicap.....	1½	123	2:02½	31,800

* Walkover.

1950

June 3	Golden Gate Mile.....	1	128	1:33½	14,550
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G. D. Widener Jockey Club Head

George D. Widener, president of the Westchester Racing Association (Belmont Park), was elected chairman of The Jockey Club in January, 1950. He succeeded William Woodward, head of the parent body of the American Turf since 1930.

ENGLISH STAKE WINNERS, 1950

Ascot Gold Cup—Wilfred Harvey's Supertello
Cambridgeshire—Chris Jarvis' Kelling
Cesarewitch—King George's Above Board
Coronation Cup—Mme. Leon Volterra's
Amour Drake

Epsom Derby—Marcel Boussac's Galcador
Epsom Oaks—Marcel Boussac's Asmena
Eclipse—Baron Guy deWaldner's Floccor
Grand National—Mrs. Luelein Brotherton's
Freebooter

King Edward VII—Gaekwar of Baroda's
Babu's Pet

King George VI—Mrs. Evan Williams' Cagire II

Lincolnshire—A. E. Saunders' Dramatic
1,000 Guineas—M. J. Ternynck's Camaree
Queen Elizabeth—Francois Dupre's Tantieme
St. Leger—Marcel Boussac's Scratch
2,000 Guineas—The Aga Khan's Palestine

U. S. RACE TRACK DISTANCES

(From nearest large cities)

New York—Aquaduct, 12 miles; Jamaica, 15; Belmont Park, 20; Monmouth Park, 35.
Baltimore—Pimlico, 5 (from Washington, 40); Laurel Park, 20 (from Washington, 20); Bowie, 21 (from Washington, 19); Havre de Grace, 38 (from Washington, 78).
Philadelphia—Garden State Park, 7 (from Camden, 4); Delaware Park, 29 (from Wilmington, 9); Atlantic City, 46 (from Atlantic City, 14).
Chicago—Hawthorne, 8; Arlington Park, 20; Washington Park, 23; Lincoln Fields, 30.
Los Angeles—Santa Anita Park, 10; Hollywood Park, 11; Del Mar, 104.
Miami (Fla.)—Hialeah Park, 19; Tropical Park, 13; Gulfstream Park, 14.
Boston—Suffolk Downs, 3; Rockingham Park, 38; Narragansett Park, 37 (from Providence, 6).
San Francisco—Tanforan, 14; Bay Meadows, 20; Golden Gate Fields, 11.
Albany (N. Y.)—Saratoga, 33.

Bright Eyes Quarter-Horse Champion

A 4-year-old mare, Bright Eyes, captured the 1950 world's quarter-horse racing championship at Tucson, Ariz.

LEADING ALL-TIME MONEY-WINNING THOROUGHBREDS

(Through Oct. 23, 1950)

Horse	Owner	Amount	Starts	1st	2d	3d	Win pct.
Citation	Calumet Farm	\$938,630	38	29	9	0	.763
*Stymie	Mrs. Ethel D. Jacobs	918,485	131	35	33	28	.267
*Armed	Calumet Farm	817,475	81	41	20	10	.506
*Assault	Robert J. Kleberg	672,520	39	17	6	6	.436
*Whirlaway	Calumet Farm	561,161	60	32	15	9	.533
On Trust	E. O. Stice & Sons	537,870	77	21	18	12	.273
Ponder	Calumet Farm	533,275	37	14	6	4	.378
Gallorette	Mrs. Marie Moore	445,535	72	27	20	13	.375
*Seabiscuit	Charles S. Howard	437,730	89	33	15	13	.371
Phalanx	C. V. Whitney	409,235	41	13	7	10	.317

* Horses which have headed list.

LEADING MONEY-WINNING OWNERS

(Since 1930)

Year	Name	Amount
1930	C. V. Whitney	\$ 385,972
1931	C. V. Whitney	422,923
1932	C. V. Whitney	403,681
1933	C. V. Whitney	241,292
1934	Brookmeade Stable	251,138
1935	A. G. Vanderbilt	303,605
1936	Milky Way Farm Stable	206,450
1937	Mrs. Charles S. Howard	214,559
1938	H. Maxwell Howard	226,495
1939	Belair Stud	284,250
1940	Charles S. Howard	334,120
1941	Calumet Farm	475,091
1942	Greentree Stable	414,432
1943	Calumet Farm	267,915
1944	Calumet Farm	601,660
1945	Maine Chance Farm	589,170
1946	Calumet Farm	564,095
1947	Calumet Farm	1,402,436
1948	Calumet Farm	1,269,710
1949	Calumet Farm	1,128,942
1950	Calumet Farm	598,955

LEADING TRAINERS SINCE 1930

(Winners saddled)

Year	Name	Winners	Earnings
1930	C. B. Irwin	92	\$ 70,411
1931	J. D. Mikel	72	49,770
1932	G. Alexandra	76	55,890
1933	H. Jacobs	116	76,965
1934	H. Jacobs	127	113,055
1935	H. Jacobs	114	95,155
1936	H. Jacobs	177	155,789
1937	H. Jacobs	134	142,474
1938	H. Jacobs	109	116,609
1939	H. Jacobs	106	100,907
1940	D. Womeldorf	108	112,137
1941	H. Jacobs	123	165,964
1942	H. Jacobs	133	186,371
1943	H. Jacobs	128	210,775
1944	H. Jacobs	117	306,821
1945	S. Lipiec	127	238,361
1946	W. Molter	122	329,725
1947	W. Molter	155	833,970
1948	W. Molter	184	1,015,547
1949	W. Molter	129	696,184
	W. H. Bishop	129	236,131
1950	R. H. McDaniel	136	310,980

LEADING JOCKEYS SINCE 1930

Year	Jockey	Mounts	Win- ners	Un- placed	Pct.
1930	H. R. Riley	861	177	416	.21
1931	H. Robie	1,174	173	673	.15
1932	J. Gilbert	1,050	212	534	.20
1933	J. Westrope	1,224	301	522	.25
1934	M. Peters	1,045	221	498	.21
1935	C. Stevenson	1,099	206	578	.19
1936	B. James	1,106	245	505	.22
1937	J. Adams	1,265	260	642	.21
1938	J. Longden	1,150	236	575	.21
1939	D. Meade	1,284	255	628	.20
1940	E. Dew	1,377	287	709	.21
1941	D. Meade	1,164	210	611	.18
1942	J. Adams	1,120	245	540	.22
1943	J. Adams	1,069	228	511	.21
1944	T. Atkinson	1,539	287	808	.19
1945	J. D. Jessop	1,085	290	445	.27
1946	T. Atkinson	1,377	233	758	.17
1947	J. Longden	1,327	316	566	.24
1948	J. Longden	1,197	319	494	.27
1949	G. Glisson	1,347	270	679	.20
1950	W. Shoemaker	1,305	297	608	.23

TOP MONEY-WINNING HORSES

Year	Horse and age	Starts	1st	Amount
1930	Gallant Fox (3)	10	9	\$308,275
1931	Top Flight (2)	7	7	219,000
1932	Gusto (3)	16	4	145,940
1933	Singing Wood (2)	9	3	88,050
1934	Cavalcade (3)	7	6	111,235
1935	Omaha (3)	9	6	142,255
1936	Granville (3)	11	7	110,295
1937	Seabiscuit (4)	15	11	168,580
1938	Stagehand (3)	15	8	189,710
1939	Challdon (3)	15	9	184,535
1940	Bimelech (3)	7	4	110,005
1941	Whirlaway (3)	20	13	272,386
1942	Shut Out (3)	12	8	238,872
1943	Count Fleet (3)	6	6	174,055
1944	Pavot (2)	8	8	179,040
1945	Busher (3)	13	10	273,735
1946	Assault (3)	15	8	424,195
1947	Armed (6)	17	11	376,325
1948	Citation (3)	20	19	709,470
1949	Ponder (3)	21	9	321,825
1950	Hill Prince (3)	12	7	263,715

NOTE: 1950 information for the four items listed above is through Oct. 23.

WORLD RECORDS

Distance	Horse, age, weight, track and location	Date	Time
$\frac{1}{4}$	Big Racket, 4, 111, Hipodromo de las Americas, Mexico City, Mexico.	February 5, 1945	1:20 $\frac{1}{4}$
$2\frac{1}{2}$ f.....	Tie Score, 5, 115, Hipodromo de las Americas, Mexico City, Mexico.	February 5, 1946	2:26 $\frac{1}{4}$
$\frac{1}{2}$	Atoka, 6, 105, Butte, Mont.	September 7, 1906	3:33 $\frac{1}{2}$
$3\frac{1}{2}$ f.....	Joe Blair, 5, 115, Juarez, Mexico.	February 5, 1916	:39
$\frac{1}{2}$	Tie Score, 4, 111, Hipodromo de las Americas, Mexico City, Mexico.	April 1, 1945	1:45 $\frac{1}{2}$
$4\frac{1}{2}$ f.....	Saggy, 2, 117, Havre de Grace, Md.	April 23, 1947	51 $\frac{1}{2}$
$\frac{1}{2}$	Pan Zareta, 5, 120, Juarez, Mexico.	February 10, 1915	57 $\frac{1}{2}$
$\frac{1}{2}$	Mals Boy, 2, 118, Washington Park, Homewood, Ill.	May 20, 1950	57 $\frac{1}{2}$
$5\frac{1}{2}$ f.....	Nance's Ace, 3, 112, Tropical Park, Coral Gables, Fla.	December 27, 1944	1:30 $\frac{3}{4}$
$5\frac{1}{2}$ f.....	Fighting Fox, 4, 126, Empire City, Yonkers, N. Y.	July 8, 1939	1:07 $\frac{3}{4}$
$\frac{1}{4}$	*Gelding by Broken Tendril, 3, 123, Brighton, England.	August 6, 1929	1:06 $\frac{1}{4}$
$\frac{1}{4}$	Bolero, 4, 122, Golden Gate Fields, Albany, Calif.	May 27, 1950	1:08 $\frac{1}{4}$
$6\frac{1}{2}$ f.....	Snark, 4, 109, Hialeah Park, Hialeah, Fla.	February 9, 1937	1:15 $\frac{1}{4}$
$\frac{1}{2}$	Ky. Colonel, 3, 116, Washington Park, Homewood, Ill.	August 10, 1949	1:21 $\frac{1}{4}$
1.....	Citation, 5, 128, Golden Gate Fields, Albany, Calif.	June 3, 1950	1:33 $\frac{3}{4}$
1 mi. 70 yd....	South Dakota, 3, 122, River Downs, Cincinnati, Ohio.	August 4, 1945	1:40
$1\frac{1}{4}$	Count Speed, 4, 122, Golden Gate Fields, Albany, Calif.	October 4, 1947	1:41
$1\frac{1}{4}$	Noor, 5, 123, Golden Gate Fields, Albany, Calif.	June 17, 1950	1:46 $\frac{1}{4}$
$1\frac{1}{4}$	Challedon, 3, 120, Keeneland, Lexington, Ky.	October 10, 1939	1:54 $\frac{1}{4}$
$1\frac{1}{4}$	Lucky Draw, 5, 123, Narragansett Park, Pawtucket, R. I.	September 14, 1946	1:54 $\frac{1}{4}$
$1\frac{1}{4}$	Saint Andrews II, 7, 133, Brighton, England.	June 21, 1939	1:59 $\frac{1}{4}$
$1\frac{1}{4}$	Noor, 5, 127, Golden Gate Fields, Albany, Calif.	June 24, 1950	1:58 $\frac{1}{4}$
$1\frac{1}{4}$	Man o' War, 3, 126, Belmont Park, Elmont, N. Y.	June 12, 1920	2:14 $\frac{1}{4}$
$1\frac{1}{2}$	The Bastard, 3, 124, Newmarket, England.	October 18, 1929	2:23
$1\frac{1}{2}$	Ace Admiral, 4, 122, Santa Anita Park, Arcadia, Calif.	July 23, 1949	2:39 $\frac{1}{4}$
1 mi. $5\frac{1}{2}$ f....	Distribute, 9, 109, River Downs, Cincinnati, Ohio.	September 7, 1940	2:51 $\frac{1}{4}$
$1\frac{1}{4}$	Buen Ojo, aged, 133, Montevideo, Uruguay, S. A.	January 8, 1922	2:52 $\frac{1}{4}$
$1\frac{1}{4}$	Pharawell, 5, 119, Gulfstream Park, Hallandale, Fla.	April 8, 1947	3:13 $\frac{1}{4}$
2.....	Polazel, 3, 142, Salisbury, England.	July 8, 1924	3:15
2 mi. 40 yd....	Winning Mark, 4, 107, Thistle Down Park, Cleveland, Ohio.	July 20, 1940	3:29 $\frac{1}{4}$
2 mi. 70 yd....	Filisteo, 7, 116, Pimlico, Baltimore, Md.	October 30, 1941	3:30 $\frac{1}{4}$
$2\frac{1}{4}$	Royal Castle, 3, 116, Jamaica, N. Y.	November 15, 1950	3:30 $\frac{3}{4}$
$2\frac{1}{4}$	Centurion, 5, 119, Newbury, England.	September 29, 1923	3:35
$2\frac{1}{4}$	Santiago, 5, 112, Narragansett Park, Pawtucket, R. I.	September 27, 1941	3:51 $\frac{1}{4}$
$2\frac{1}{4}$	Dakota, 4, 116, Lingfield, England.	May 27, 1927	3:37 $\frac{1}{4}$
$2\frac{1}{4}$	Wiki Jack, 4, 97, Tijuana, Mexico.	February 8, 1925	4:15
$2\frac{1}{4}$	Miss Grillo, 6, 118, Pimlico, Md.	November 12, 1948	4:14 $\frac{1}{4}$
$2\frac{1}{4}$	†Worthman, 5, 101, Tijuana, Mexico.	February 22, 1925	4:51 $\frac{1}{4}$
$2\frac{1}{4}$	Shot Put, 4, 126, Washington Park, Homewood, Ill.	August 14, 1940	4:48 $\frac{1}{4}$
$2\frac{1}{4}$	†Bosh, 5, 100, Tijuana, Mexico.	March 8, 1925	5:23
3.....	Farragut, 5, 113, Agua Caliente, Mexico.	March 9, 1941	5:15
$3\frac{1}{2}$	Winning Mark, 4, 104, Washington Park, Homewood, Ill.	August 21, 1940	6:13
4.....	Sotemia, 5, 119, Churchill Downs, Louisville, Ky.	October 7, 1912	7:10 $\frac{1}{4}$

* $3/4$ mile course at Brighton is started from a hill and is down grade to within one-third of a mile of the finish.
† Track heavy. ‡ Track sloppy.

Straight Course

Distance	Horse, age, weight, track and location	Date	Time
$\frac{1}{4}$	Bob Wade, 4, 122, Butte, Mont.	August 20, 1890	21 $\frac{1}{4}$
$\frac{1}{4}$	King Rhymur, 2, 118, Santa Anita Park, Arcadia, Calif.	February 27, 1947	:32
$\frac{1}{2}$	Gloaming, 6, 127, Trentham, Wellington, New Zealand.	January 12, 1921	:45
$4\frac{1}{2}$ f.....	Black Douglas, 2, 115, Belmont Park, Elmont, N. Y.	May 27, 1950	:50 $\frac{1}{4}$
$\frac{1}{2}$	Devineress, 3, 103, Epsom Downs, Epsom, England	June 2, 1933	:54 $\frac{1}{4}$
$5\frac{1}{2}$ f.....	Plater, 2, 107, Morris Park, New York, N. Y.	October 21, 1902	1:02 $\frac{3}{4}$
$\frac{1}{4}$	Artful, 2, 130, Morris Park, New York, N. Y.	October 15, 1904	1:08
$6\frac{1}{2}$ f.....	Porter's Mite, 2, 119, Belmont Park, Elmont, N. Y.	September 17, 1938	1:14 $\frac{1}{4}$
*Abt $\frac{1}{4}$	High Strung, 2, 122, Belmont Park, Elmont, N. Y.	September 15, 1923	1:19
$\frac{1}{4}$	First Edition, 4, 126, Hurst Park, Hampton Court England.	May 25, 1926	1:20
1.....	Mopsus, 3, 105, Brighton, England.	June 22, 1939	1:32
$1\frac{1}{4}$	Banquet, 3, 108, Monmouth Park, New Jersey.	July 17, 1890	2:03 $\frac{1}{4}$

* 165 feet short of $7/8$ mile.

French Stake Winners, 1950

Prix de l'Arc de Triomphe—Francois Dupre's Tantieme
Grand Prix de Paris—Baron Guy de Rothschild's Vieux Manoir
Prix du Jockey Club (French Derby)—Marcel Boussac's Scratch

Prix de Diane (French Oaks)—Henri Bletry's Aglae Grace
Grand Prix de Deauville—Baron Guy de Rothschild's Alizier
Grand Steeplechase de Paris—Mme. L. Anrousseau's Mell Melo

Man o' War's Record

(Bred by August Belmont. Owned by Glen Riddle Farm.)

1919

Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
June 6	Belmont Park	Purse	$\frac{5}{8}$ st	115	1	:59	3-5	\$ 500
June 9	Belmont Park	Keene Memorial Stakes	$5\frac{1}{2}$ f st	115	1	1:05 $\frac{5}{8}$	7-10	4,200
June 21	Jamaica	Youthful Stakes	$5\frac{1}{2}$ f	120	1	1:05 $\frac{3}{8}$	1-2	3,850
June 23	Aqueduct	Hudson Stakes	$\frac{5}{8}$	130	1	1:01 $\frac{1}{8}$	1-10	2,825
July 5	Aqueduct	Tremont Stakes	$\frac{5}{8}$	130	1	1:13	1-10	4,800
Aug. 2	Saratoga	United States Hotel Stakes	$\frac{5}{8}$	130	1	1:12 $\frac{3}{8}$	9-10	7,600
Aug. 13	Saratoga	Sanford Memorial Stakes	$\frac{5}{8}$	130	2	1:11 $\frac{1}{8}$	11-20	700
Aug. 23	Saratoga	Grand Union Hotel Stakes	$\frac{5}{8}$	130	1	1:12	11-20	7,600
Aug. 30	Saratoga	Hopeful Stakes	$\frac{5}{8}$	130	1	1:13	9-20	24,600
Sept. 13	Belmont Park	Belmont Futurity	$\frac{5}{8}$ st	127	1	1:11 $\frac{1}{8}$	1-2	26,655

Total..... \$83,320

1920

Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
May 18	Pimlico	Preakness Stakes	1 $\frac{1}{2}$	126	1	1:51 $\frac{1}{8}$	4-5	\$23,000
May 29	Belmont Park	Withers Stakes	1	118	1	1:35 $\frac{1}{8}$	1-7	4,825
June 12	Belmont Park	Belmont Stakes	1 $\frac{1}{2}$	126	1	2:14 $\frac{1}{8}$	1-25	7,950
June 22	Jamaica	Stuyvesant Handicap	1	135	1	1:41 $\frac{1}{8}$	1-100	3,850
July 10	Aqueduct	Dwyer Stakes	1 $\frac{1}{2}$	126	1	1:49 $\frac{1}{8}$	1-5	4,850
Aug. 7	Saratoga	Miller Stakes	1 $\frac{3}{16}$	131	1	1:56 $\frac{1}{8}$	1-30	4,700
Aug. 21	Saratoga	Travers Stakes	1 $\frac{1}{2}$	129	1	2:01 $\frac{1}{8}$	2-9	9,275
Sept. 4	Belmont Park	Lawrence Realization Stakes	1 $\frac{5}{8}$	126	1	2:40 $\frac{1}{8}$	1-100	15,040
Sept. 11	Belmont Park	Jockey Club Stakes	1 $\frac{1}{2}$	118	1	2:28 $\frac{1}{8}$	1-100	5,850
Sept. 18	Havre de Grace	Potomac Handicap	1 $\frac{1}{2}$	138	1	1:44 $\frac{1}{8}$	15-100	6,800
Oct. 12	Kenilworth Park	Kenilworth Park Gold Cup	1 $\frac{1}{2}$	120	1	2:03	1-20	80,000

Total..... \$166,140

RECAPITULATION

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1919	2	10	9	1	0	0	\$ 83,325
1920	3	11	11	0	0	0	166,140
Totals	21	20	1	0	0	0	\$249,465

(Man o' War died on Nov. 1, 1947.)

THOROUGHBRED RACING ASSOCIATIONS OF THE UNITED STATES, INC.

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Aqueduct	Fair Grounds (New Orleans)	Michigan Racing Assn.	Saratoga
Arlington Park	Garden State Park	Monmouth Park	Sportsman's Park
Atlantic City	Havre de Grace	Narragansett Park	Suffolk Downs
Bel Air	Hialeah Park	Oaklawn Park	Tanforan
Belmont Park	Hollywood	Pimlico	Timonium
Centennial Park	Jamaica	Playfair	Tropical Park
Churchill Downs	Keeneland	Randall Park	United Hunts
Delaware Park	Laurel	Rockingham Park	Washington Park
Del Mar	Lincoln Fields		

Address—400 Madison Avenue, New York 17, N. Y.

On May 4, 1950, Gordon Richards, who has ridden more winners than any jockey in the history of the turf, registered his 4,000th

victory. It took the noted English rider 18,478 mounts in 26 years to achieve the coveted mark.

OTHER STAKE WINNERS IN 1950

(This compilation does not include victors listed in tabular matter.)

Key to Abbreviations Used

AQ—Aqueduct (N. Y.)	DM—Del Mar (Calif.)	HO—Hollywood Park (Cal.)	P—Pimlico (Md.)
AP—Arlington Park (Ill.)	EC—Empire City (N. Y.)*	J—Jamaica (N. Y.)	RP—Rockingham Park (N. H.)
AC—Atlantic City (N. J.)	FG—Fair Grounds (La.)	K—Keeneland (Ky.)	S—Saratoga (N. Y.)
B—Bay Meadows (Calif.)	GS—Garden State (N. J.)	L—Laurel Park (Md.)	SA—Santa Anita Park (Cal.)
BE—Belmont Park (N. Y.)	GG—Golden Gate (Calif.)	LF—Lincoln Fields (Ill.)†	SD—Suffolk Downs (Mass.)
BO—Bowie (Md.)	GP—Gulfstream Park (Fla.)	MP—Moanmouth Park (N. J.)	T—Tanforan (Calif.)
CD—Churchill Downs (Ky.)	HG—Havre de Grace (Md.)	N—Narragansett Park (R. I.)	TP—Tropical Park (Fla.)
D—Detroit (Mich.)	HP—Hialeah Park (Fla.)	OP—Oaklawn Park (Ark.)	WP—Washington Park (Ill.)
DP—Delaware Park (Del.)	HA—Hawthorne Park (Ill.)		

* At Jamaica. † At Washington Park.

3-Year-Olds and Over

Stake, track, winner, jockey, weight	Win val.	Stake, track, winner, jockey, weight	Win val.
ALL AMERICAN (AC)—Dart By, F. Fernandez, 111 (\$12,212) and Three Rings, H. Woodhouse, 122	\$12,212	MERCHANTS' & CITIZENS' (S-at-J)—My Request, T. Atkinson, 124	\$15,400
AMERICAN (HO)—Noor, J. Longden, 132	32,500	MERMAID (AC)—Imacom, R. J. Martin, 122	7,300
ATLANTIC CITY TURF—Going Away, J. Culmone, 116	18,475	METROPOLITAN (AC)—Greek Ship, H. Woodhouse, 105	22,450
AQUEDUCT—Wine List, T. Atkinson, 108	15,975	MIAMI BEACH (HP)—Chicle II, H. Woodhouse, 130	8,825
ARGONAUT (HO)—Old Rockport, G. Glisson, 119	18,150	MISTY ISLE (WP)—Miss Highbrow, K. Church, 109	15,300
ARLINGTON (AP)—Ponder, S. Brooks, 128	46,800	MODESTY (AP)—Myrtle Charm, G. Lasswell, 121	21,625
BAY SHORE (AQ)—Piet, N. Combest, 120	11,900	MONMOUTH (MP)—Greek Ship, J. Culmone, 107	21,250
BELDAME (AQ)—Next Move, N. Combest, 116	47,400	MYRTLEWOOD (AP)—Prop, D. Scurlock, 108	16,350
BEN ALI (K)—Mount Marcy, K. Church, 117	8,850	NEW CASTLE (DP)—Adile, J. Gilbert, 119	21,650
BEVERLY (WP)—Lithe, E. Nelson, 120	18,175	NEW ORLEANS (FG)—Red Camelia, P. Milligan, 104	21,600
BIDWELL MEMORIAL (HA)—Seaward, G. Glisson, 115	12,300	NEW ROCHELLE (all ages) (EC)—Magic Words, T. Atkinson, 113	12,325
BLACK HELEN (HP)—Bewitch, O. Scurlock, 126	13,825	NEW YORK (BE)—Pillaster, R. J. Martin, 112	17,250
BRANDYWINE (DP)—Double Brandy, J. Robertson, 112	9,700	OMNIBUS (MP)—Double Brandy, M. Basile, 112	12,600
BUCKEYE (Randall Park)—Seaward, R. L. Baird, 123	12,050	PACIFIC (GG)—Bolero, J. Longden, 122	7,480
CAMDEN (GS)—Olympia, J. Stout, 126	12,575	PAGEANT (AC)—Going Away, J. Culmone, 110	12,200
CARTER (AQ)—Guillotine, T. Atkinson, 109	16,950	PAUMONOK (K)—Olympia, E. Arcaro, 124	21,400
CHICAGO (HA)—Lalco, J. D. Jessop, 111	8,875	PHOENIX (K)—Mount Marcy, D. Dodson, 115	8,700
CHURCHILL DOWNS—Fleeting Star, S. Brooks, 117	8,550	PIMLICO CUP—Double Brandy, F. Bone, 113	11,025
CLANG (WP)—Wistful, S. Brooks, 113	15,500	PRINCETON (GS)—I Will, J. Culmone, 112 (\$5,600) and Eagle River, L. Batchelor, 108	5,600
CLARK (CD)—Mount Marcy, S. Brooks, 121	8,125	QUEENS COUNTY (AQ)—Three Rings, H. Woodhouse, 126	15,200
COLONIAL (GS)—Nell K., J. Stout, 123	12,175	QUESTIONNAIRE (EC)—One Hitter, T. Atkinson, 105	20,050
COLORADO MILE (Centennial Park)—Mad Moment, N. Richardson, 113	12,000	ROSEBEN (BE)—Olympia, E. Arcaro, 130	8,475
COMELY (EC)—Siam, O. Scurlock, 112	20,150	ROWE MEMORIAL (BO)—The Pincher, R. Nash, 120	6,275
CORRECTION (J)—Sweet Dream, E. Arcaro, 123	12,700	RUMSON (MP)—Casemate, W. Balzaretto, 115	37,600
DEL MAR—Frankly, W. Shoemaker, 120	9,650	SAN ANTONIO (SA)—Ponder, S. Brooks, 128	3,400
DIXIE (P)—Loser Weeper, N. Combest, 108	18,450	SAN FRANCISCO (T)—On Trust, J. Longden, 119	42,050
EDGEMERE (AQ)—Three Rings, H. Woodhouse, 121	16,175	SAN CARLOS (SA)—Manyunk, E. Guerlin, 112	40,400
EDWARD BURKE (HG)—Loser Weeper, J. Robertson, 110	8,300	SAN JUAN CAPISTRANO (SA)—Noor, J. Longden, 117	44,100
EQUIPOISE MILE (AP)—Oil Capitol, K. Church, 111	19,700	SAN PASQUEL (SA)—Solidarity, R. Neves, 121	11,900
EXCELSIOR (J)—Arise, D. Dodson, 116	17,200	SANTA MARGARITA (SA)—Two Lea, S. Brooks, 126	35,700
FALL HIGHWEIGHT (all ages) (BE)—Arise, D. Dodson, 133	17,800	SARATOGA—Bettie, S. W. Boland, 114	20,850
FARRELL (all ages) (BO)—Dart By, R. J. Martin, 115	7,875	SARATOGA CUP—Cochise, E. Arcaro, 126	8,000
FIRENZE (J)—Red Camelia, P. Milligan, 110	20,250	SOUTHERN MARYLAND (all ages) (BO)—Double Brandy, F. Bone, 114	20,375
FLETCHING (EC)—Shellas Reward, F. Fernandez, 116	15,425	STARS AND STRIPES (AP)—Inseparable, K. Church, 114	21,050
FORTY-NINERS (GG)—Noor, J. Longden, 123	6,940	SUSSEX (DP)—Cochise, O. Scurlock, 125	27,550
GOLD CUP (EC)—Greek Ship, E. Arcaro, 119	39,700	TANFORAN—Ponder, S. Brooks, 129	17,250
GOLDEN GATE—Noor, J. Longden, 127	32,950	TOBOGGAN (BE)—Piet, J. Nichols, 118	12,200
GOLDEN GATE MILE—Citation, S. Brooks, 128	14,500	TOP FLIGHT (BE)—Nell K., G. Hettlinger, 126	26,500
GOVERNOR'S (D)—Fancy Flyer, M. N. Gonzalez, 120	8,900	TRENTON (GS)—Chicle II, S. Boulmetis, 115	13,000
GREY LAG (J)—Lotowhite, K. Stuart, 103	20,350	VALLEY FORGE (GS)—Loser Weeper, N. Combest, 112	18,200
HAWTHORNE GOLD CUP—Dr. Ole Nelson, G. Porch, 110	19,750	VINELAND (GS)—Almahmoud, J. Stout, 108	13,150
INTERBOROUGH (J)—Shellas Reward, E. Arcaro, 120	17,225	VOSBURGH (all ages) (BE)—Tea-Maker, J. Robertson, 118	11,150
JAMAICA—Piet, N. Combest, 114	12,035	WASHINGTON (L)—Abstract, E. Campbell, 107	33,000
JOCKEY CLUB GOLD CUP (BE)—Hill Prince, E. Arcaro, 117	36,000	WASHINGTON PARK—Inseparable, K. Church, 110	19,275
LADIES (BE)—Next Move, E. Guerlin, 120	20,700	WHIRLAWAY (WP)—Curandero, D. Madden, 110	16,200
LONGACRES MILE—Two and Twenty, E. Arcaro, 120	9,550	WHITNEY (S)—Piet, N. Combest, 116	8,925
MCLENNAN (HP)—Three Rings, H. Woodhouse, 117	24,300	WILMINGTON (DP)—Royal Blood, G. Lasswell, 113	11,775
MATTIATTAN (BE)—One Hitter, T. Atkinson, 110	20,800	WILSON (S)—Capet, T. Atkinson, 120	
MATRON (AP)—Lithe, E. Nelson, 108	15,275		

Rich Race to Ponder

Calumet Farm's Ponder and Two Lea finished one, two in the 1950 running of the \$122,300 Santa Anita Maturity, a race ex-

clusively for 4-year-olds. Ponder's victory was worth \$75,200 and Two Lea earned \$20,000.

3-Year-Olds

Stake, track, winner, jockey, weight	Win val.
ACORN (BE)—Siamia, T. Atkinson, 121.....	\$12,600
ALABAMA (S)—Busanda, R. Penman, 108.....	15,850
ARKANSAS DERBY (OP)—Big Ike, H. Keene, 117.....	7,150
ASHLAND (K)—Wondring, H. Manifold, 112.....	10,260
BAHAMAS (HP)—Theory, D. Dodson, 124.....	7,245
BLUE GRASS (K)—Mr. Trouble, D. Dodson, 121.....	20,300
CHESAPEAKE (HG)—Sunglow, J. Robertson, 112.....	18,725
CHESAPEAKE TRIAL (HG)—Quiz Show, J. Gilbert, 122.....	6,225
CHOICE (MP)—Greek Ship, J. Culmone, 122.....	19,700
CINEMA (HO)—Great Circle, R. Neves, 121.....	15,150
CLEOPATRA (AP)—Here's Hoping, D. Madden, 115.....	15,650
COACHING CLUB AMERICAN OAKS (BE)—Next Move, E. Guerin, 121.....	44,500
DELAWARE OAKS—Next Move, E. Guerin, 119.....	24,375
DEL MAR DERBY—Great Circle, R. Neves, 123.....	9,400
DERBY TRIAL (CD)—Black George, E. Nelson, 112.....	9,850
DICK WELLES (AP)—Your Host, J. Gilbert, 130.....	15,775
DISCOVERY (AQ)—Sunglow, D. Dodson, 113.....	15,100
DWYER (AQ)—Greek Song, O. Scurlock, 116.....	27,400
EMPIRE CITY—All at Once, N. Wall, 103.....	22,750
EXPERIMENTAL NO. 1 (J)—Hill Prince, E. Arcaro, 124.....	14,200
EXPERIMENTAL NO. 2 (J)—Lotowhite, S. Boulmetis, 107.....	18,750
FLAMINGO (HP)—Oil Capitol, K. Church, 128.....	44,800
GAZELLE (AQ)—Next Move, E. Guerin, 121.....	15,250
GOLDEN GATE DERBY—Sir Butch, G. Glisson, 113.....	15,250

Stake, track, winner, jockey, weight	Win val.
HOLLYWOOD OAKS (HO)—Mrs. Fuddy, W. Shoemaker, 109.....	\$11,750
JEROME (BE)—Hill Prince, E. Arcaro, 129.....	17,150
JERSEY (GS)—Ferd, C. McCreary, 118.....	21,850
KENT (DP)—Your Host, J. Gilbert, 126.....	23,250
KENTUCKY OAKS (CD)—Ari's Mona, W. Boland, 116.....	21,050
LAMPLIGHTER (MP)—Lights Up, G. Hettlinger, 119.....	14,100
LAWRENCE REALIZATION (BE)—Bed o' Roses, N. Combest, 107.....	15,600
LOUISIANA DERBY (FG)—Greek Ship, C. Errico, 123.....	12,900
LEONARD RICHARDS (DP)—Post Card, J. Gilbert, 114.....	24,150
MONMOUTH OAKS (MP)—Siamia, E. Arcaro, 121.....	8,900
PEABODY MEMORIAL (LP)—Lot O' Luck, K. Church, 121.....	18,500
PETER PAN (BE)—Lights Up, G. Hettlinger, 117.....	12,550
PRINCESS DOREEN (AP)—Siamia, G. Lasswell, 118.....	12,350
PRIORRESS (J)—Next Move, E. Guerin, 115.....	12,525
PROVIDENCE (N)—Passermon, P. Roberts, 107.....	12,400
SAN FELICE (SA)—Your Host, J. Longden, 128.....	45,000
SANTA SUSAN (SA)—Special Touch, E. Arcaro, 115.....	46,000
SARANAC (S-at-J)—Sunglow, E. Arcaro, 115.....	10,825
SHERIDAN (WP)—Your Host, J. Gilbert, 126.....	15,150
SHEVLIN (AQ)—Dooly, T. Atkinson, 112.....	15,375
SWIFT (BE)—Ferd, E. Arcaro, 126.....	9,350
WESTERNER (HO)—Valquest, J. Westrope, 111.....	17,200
WITHERS (BE)—Hill Prince, E. Arcaro, 126.....	20,700
YANKEE (SD)—Crown Mo, H. Trent, 107.....	11,075

2-Year-Olds

ALBANY (S-at-J)—Patch, O. Scurlock, 112.....	9,025
ARLINGTON LASSIE (AP)—Shawnee Squaw, A. D. Rivera, 113.....	43,865
ASTORIA (AQ)—Jacodema, R. Permano, 113.....	8,950
ASTORIA (AQ)—Sungari, O. Scurlock, 122.....	9,125
BABYLON (AQ)—Mohammedan, E. Arcaro, 114.....	10,000
BASHFORD MANOR (CD)—Kings Hope, R. L. Baird, 122.....	10,625
BREEDERS' FUTURITY (K)—Big Stretch, T. Atkinson, 117.....	27,674
CHAMPAGNE (BE)—Uncle Militia, H. Woodhouse, 122.....	24,050
CHRISTIANA (DP)—Bugledrums, G. Hettlinger, 116.....	11,425
COLLEEN (MP)—Sungari, O. Scurlock, 119.....	10,400
COWDIN (AQ)—Away Away, O. Scurlock, 110.....	16,875
DEBUTANTE (CD)—Juliet's Nurse, K. Church, 122.....	10,500
DEL MAR FUTURITY—Patch, J. Longden, 118.....	23,700
DEMOISELLE (EC)—Aunt Jinny, N. Wall, 116.....	30,700
DOVER (DP)—Count Turf, W. Mehrtens, 119.....	12,475
EAST VIEW (EC)—Nullity, D. Dodson, 122.....	36,350
FASHION (BE)—Remove, W. Boland, 110.....	10,295
FLASH (S)—Northern Star, E. Guerin, 116.....	7,875
GAZELLE (AQ)—Next Move, E. Guerin, 121.....	15,250
GARDEN STATE—Isaws, J. Culmone, 119.....	13,650
GEO. WOLF MEMORIAL (WP)—Sir Bee Bum, J. Adams, 112.....	12,625
GRAND UNION HOTEL (S)—Bettie Morn, E. Arcaro, 114.....	14,550
GREAT AMERICAN (AQ)—Silver Wings, G. Lasswell, 117.....	12,700
HAGGIN (HO)—Hindu Star, B. James, 122.....	16,900
HAWTHORNE JUVENILE—Ruhe, A. D. Rivera, 115.....	9,925
HYDE PARK (AP)—Kings Hope, R. L. Baird, 122.....	12,375
JOLIET (LF)—Kings Hope, R. L. Baird, 125.....	8,625

Melbourne Cup to Comic Court

Comic Court, a 5-year-old horse owned by R. A. J. and D. A. J. Lees, won the 90th running of the Melbourne Cup at Sydney, Australia, before a crowd of 70,000 last November. The son of Powers Court, carrying top weight of 131 pounds, captured the major share of the \$28,000 purse by covering the two miles in the record time of 3 minutes 19½ seconds.

MODERN PENTATHLON

World Champions, 1950

Individual—Lars Hall, Sweden	19 pts.
Team—Sweden	90 pts.

JUVENILE (BE)—Liberty Rab, P. Milligan, 122.....	11,800
KY JOCKEY CLUB (CD)—Pur Sang, T. Barrow, 118.....	21,995
LAFAYETTE (K)—Mals Boy, J. D. Jessop, 119.....	15,150
MATRON (BE)—Atlanta, H. Woodhouse, 117.....	38,690
MAYFLOWER (SD)—Imarello, O. Scurlock, 118.....	6,450
NATIONAL STALLION (colts) (BE)—Volt, E. Arcaro, 122.....	17,030
NATIONAL STALLION (fillies) (BE)—Sungari, G. Hettlinger, 119.....	16,590
NEW FERTILITY (MP)—Spartan Valor, J. Gilbert, 122.....	12,185
POLLYANNA (WP)—Flyamanita, G. Porch, 113.....	12,600
PRAIRIE STATE (WP)—Longleat, K. Church, 114.....	12,575
PRIMER (AP)—Rough'n Tumble, R. J. Martin, 113.....	12,700
PRINCESS PAT (WP)—Flyamanita, G. Porch, 116.....	43,710
RANGOCAS (GS)—Brasen Brat, M. Basile, 117.....	10,275
REMSEN (J)—Repetoire, K. Church, 112.....	8,575
ROSEDALE (J)—Bank Account, C. Errico, 119.....	9,875
SANFORD (S)—Big Stretch, E. Arcaro, 114.....	7,900
SAPLING (MP)—Battlefield, E. Arcaro, 122.....	10,400
SARATOGA SPECIAL—Battlefield, E. Arcaro, 122.....	11,500
SCHUYLerville (S)—Atlanta, H. Woodhouse, 117.....	8,025
SELIMA (L)—Aunt Jinny, N. Wall, 122.....	37,170
SPINAWAY (S)—Atlanta, H. Woodhouse, 116.....	14,950
TREMONT (AQ)—Battlefield, E. Arcaro, 126.....	9,625
U. S. HOTEL (S)—Northern Star, E. Guerin, 118.....	14,275
WM. PENN (GS)—Lord Putnam, N. Wall, 117.....	10,575
WORLD'S PLAYGROUND (AC)—Lord Putnam, B. Strange, 122.....	11,450
YOUTHFUL (1st div.) (J)—Isaws, C. Errico, 117.....	9,150
YOUTHFUL (2d div.) (J)—Battlefield, E. Arcaro, 122.....	9,350

Other Tennis Champions, 1950
NATIONAL HARD-COURT

Singles—Art Larsen, San Leandro, Calif.
 Women's singles—Mrs. Patricia C. Todd, La Jolla, Calif.
 Doubles—Tom Brown, San Francisco-Tony Trabert, Cincinnati
 Women's doubles—Barbara Scofield, San Francisco-Mrs. Patricia C. Todd
 Mixed doubles—Dr. Arnold Beisser, San Francisco-Mrs. Magda Rurac, Los Angeles

EASTERN COLLEGE

Singles—Dick Savitt, Cornell
 Women's singles—Barbara J. Scarlett, Vassar
 Doubles—Dick Savitt-Len Steiner, Cornell
 Women's doubles—Harriet Geller-Anky Vander Stok, Syracuse
 Freshman—Keston Delmling, Duke
 Mens' team—Cornell
 Women's team—Vassar

FOOTBALL

THE PASTIME of kicking a ball around goes back beyond the limits of recorded history. Ancient savage tribes played football of a primitive kind. There was a ball-kicking game played by Athenians and Spartans and Corinthians 2500 years ago and the Greeks had a name for it: *Episkuros*. The Romans had a somewhat similar game called *Harpastum* and are supposed to have carried the game with them when they invaded the British Isles in the First Century, B.C.

Undoubtedly the game known in the United States as Football traces directly to the English game of Rugby, though the modifications have been many and rather sweeping in some directions. There was informal football on our college lawns well over a century ago and an annual Freshman-Sophomore series of "scrimmages" began at Yale in 1840. But the first formal intercollegiate football game in this country was the Princeton-Rutgers contest played at New Brunswick, N. J., on Nov. 6, 1869, with Rutgers winning by 6 goals to 4. Columbia took to the intercollegiate football field in 1870 and Yale in 1872. Soon many colleges were playing football in the autumn.

In those old days games were played with twenty-five, twenty, fifteen or eleven

men on a side by mutual agreement. In 1880 there was a football convention at which Walter Camp of Yale persuaded the delegates to agree to a rule calling for eleven players on a side. In 1882 there was adopted the rule requiring the offensive team to make 5 yards in three downs or surrender the ball to its opponents. The game grew so rough that it was attacked as brutal by many critics and some colleges abandoned the sport. Conditions were so bad in 1906 that President Theodore Roosevelt, an enthusiast for all sports, called a meeting of Yale, Harvard and Princeton representatives at the White House in the hope of reforming and improving the game. The outcome was that the game, with the forward pass introduced and some other modifications of the rules inserted, became faster and cleaner and gradually grew to the tremendous popularity it enjoys today.

Professional football, now firmly established, is an outgrowth of intercollegiate football. The first professional game was played in 1895 at Latrobe, Pa. The National Football League was founded in 1921. The All-America Conference went into action in 1946. At the end of the 1949 season the two major play-for-pay circuits merged, retaining the name of the older league.

Intercollegiate Statistics

Source: Official N.C.A.A. Football Guide

RECORD OF ANNUAL POSTSEASON GAMES

Rose Bowl (Pasadena, Calif.)

1902	Michigan 49, Stanford 0
1916	Washington State 14, Brown 0
1917	Oregon 14, Pennsylvania 0
1918	Mare Island Marines 19, Camp Lewis 7
1919	Great Lakes 17, Mare Island Marines 0
1920	Harvard 7, Oregon 6
1921	California 28, Ohio State 0
1922	Washington & Jefferson 0, California 0
1923	Southern California 14, Penn State 3
1924	Navy 14, Washington 14
1925	Notre Dame 27, Stanford 10
1926	Alabama 20, Washington 19
1927	Alabama 7, Stanford 7
1928	Stanford 7, Pittsburgh 6
1929	Georgia Tech 8, California 7
1930	Southern California 47, Pittsburgh 14
1931	Alabama 24, Washington State 0
1932	Southern California 21, Tulane 12

* Played at Durham, N. C.

1933	Southern California 35, Pittsburgh 0
1934	Columbia 7, Stanford 0
1935	Alabama 29, Stanford 13
1936	Stanford 7, Southern Methodist 0
1937	Pittsburgh 21, Washington 0
1938	California 13, Alabama 0
1939	Southern California 7, Duke 3
1940	Southern California 14, Tennessee 0
1941	Stanford 21, Nebraska 13
1942	Oregon State 20, Duke 16*
1943	Georgia 9, U. C. L. A. 0
1944	Southern California 29, Washington 0
1945	Southern California 25, Tennessee 0
1946	Alabama 34, Southern California 14
1947	Illinois 45, U. C. L. A. 14
1948	Michigan 49, Southern California 0
1949	Northwestern 20, California 14
1950	Ohio State 17, California 14

Bagnell Has Field Day Against Dartmouth

Francis J. (Reds) Bagnell, Penn's 1950 football captain, set two national collegiate offensive records as he led his team to a 42-26 victory over Dartmouth at Franklin Field, Philadelphia, last October. He completed 14 passes in succession to shatter one mark and his total of 490 yards gained from running and passing was good for another

record. In all, he connected with 20 passes in 29 attempts for 276 yards and added 214 yards on rushing plays.

A professional football attendance record was set on Aug. 16, 1950, when 95,625 fans saw the Washington Redskins beat the Los Angeles Rams, 17 to 14, in an exhibition game in Memorial Coliseum, Los Angeles.

Sugar Bowl (New Orleans, La.)

1935	Tulane 20, Temple 14
1936	Texas Christian 3, Louisiana State 2
1937	Santa Clara 21, Louisiana State 14
1938	Santa Clara 6, Louisiana State 0
1939	Texas Christian 15, Carnegie Tech 7
1940	Texas A & M 14, Tulane 13
1941	Boston College 19, Tennessee 13
1942	Fordham 2, Missouri 0
1943	Tennessee 14, Tulsa 7
1944	Georgia Tech 20, Tulsa 18
1945	Duke 29, Alabama 26
1946	Oklahoma A & M 33, St. Mary's (Calif.) 13
1947	Georgia 20, North Carolina 10
1948	Texas 27, Alabama 7
1949	Oklahoma 14, North Carolina 6
1950	Oklahoma 35, Louisiana State 0

Cotton Bowl (Dallas, Tex.)

1937	Texas Christian 16, Marquette 6
1938	Rice 28, Colorado 14
1939	St. Mary's (Calif.) 20, Texas Tech 13
1940	Clemson 6, Boston College 3
1941	Texas A & M 13, Fordham 12
1942	Alabama 29, Texas A & M 21
1943	Texas 14, Georgia Tech 7
1944	Randolph Field 7, Texas 7
1945	Oklahoma A & M 34, Texas Christian 0
1946	Texas 40, Missouri 27
1947	Louisiana State 0, Arkansas 0
1948	Southern Methodist 13, Penn State 13
1949	Southern Methodist 21, Oregon 13
1950	Rice 27, North Carolina 13

Orange Bowl (Miami, Fla.)

1933	Miami 7, Manhattan 0	1942	Georgia 40, Texas Christian 26
1934	Duquesne 33, Miami 7	1943	Alabama 37, Boston College 21
1935	Bucknell 26, Miami 0	1944	Louisiana State 19, Texas A & M 14
1936	Catholic University 20, Mississippi 19	1945	Tulsa 26, Georgia Tech 12
1937	Duquesne 13, Mississippi State 12	1946	Miami 13, Holy Cross 6
1938	Alabama Poly. 6, Michigan State 0	1947	Rice 8, Tennessee 0
1939	Tennessee 17, Oklahoma 0	1948	Georgia Tech 20, Kansas 14
1940	Georgia Tech 21, Missouri 7	1949	Texas 41, Georgia 28
1941	Mississippi State 14, Georgetown 7	1950	Santa Clara 21, Kentucky 13

Famous Series Records

Until 1883, when scoring by points was generally adopted, scores were kept by goals, touchdowns and safeties. Earlier results of Big Three games: 1873—Prin. 3, Yale 0; 1874—Yale 1G, Harv. 2T; Yale 10, Prin. 0; 1877—Yale 0, Prin. 0; Harv. 1G, 1T, Prin. 1T (Spring); Prin. 1G, 1T, Harv. 2T (Fall); 1878—Yale 1G, 7S, Harv. 13S; Prin. 1, Yale 0; Prin. 1T, Harv. 0; 1879—Harv. 4S, Yale 2S; Yale 0, Prin. 1G; Harv. 0; 1880—Yale 1G, 1T, 2S, Harv. 9S; Yale 0, Prin. 0; Prin. 2G, 2T, Harv. 1G, 1T; 1881—Harv. 4S, Yale 0; Yale 0, Prin. 0; Harv. 0, Prin. 0; 1882—Yale 1G, 3T, Harv. 2S; Yale 2, Prin. 1; Harv. 1G, 1T, Prin. 1G.

Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy	Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy
1883	2 23	6 0	7 26	.. ..	1916	3 6	10 0	3 0	15 7
1884	0 52	0 0	6 36	.. ..	1919	10 3	6 13	10 10	0 6
1885	.. ..	5 6	.. ..	.. ..	1920	9 0	0 20	14 14	0 7
1886	4 29	0 0	0 12	.. ..	1921	10 3	13 7	3 10	0 7
1887	8 17	12 0	12 0	.. ..	1922	10 3	0 3	3 10	17 14
1888	.. ..	10 0	6 18	.. ..	1923	0 13	27 0	5 0	0 0
1889	0 6	0 10	15 41	.. ..	1924	6 19	10 0	0 34	12 0
1890	12 6	32 0	.. ..	0 24	1925	0 0	12 25	0 36	10 3
1891	0 10	19 0	.. ..	32 16	1926	7 12	7 10	0 12	21 21
1892	0 6	12 0	.. ..	4 12	1927	0 14	14 6	.. ..	14 9
1893	0 6	0 6	.. ..	4 6	1928	17 0	2 12	.. ..	.. ..
1894	4 12	24 0	.. ..	.. ..	1929	10 6	13 0	.. ..	.. ..
1895	.. ..	20 10	4 12	.. ..	1930	13 0	10 7	.. ..	6 0
1896	.. ..	6 24	0 12	.. ..	1931	0 3	51 14	.. ..	17 7
1897	0 0	6 0	.. ..	.. ..	1932	0 19	7 7	.. ..	20 0
1898	17 0	0 6	.. ..	.. ..	1933	19 6	2 27	.. ..	12 7
1899	0 0	10 11	.. ..	17 5	1934	0 14	7 0	0 19	0 3
1900	0 28	29 5	.. ..	7 11	1935	7 14	7 38	0 35	28 6
1901	22 0	12 0	.. ..	11 5	1936	13 14	26 23	14 14	0 7
1902	0 23	12 5	.. ..	22 8	1937	13 6	26 0	34 6	6 0
1903	0 16	6 11	.. ..	40 5	1938	7 0	7 20	26 7	14 7
1904	0 12	12 0	.. ..	11 0	1939	7 20	7 13	6 9	0 10
1905	0 6	23 4	.. ..	6 6	1940	28 0	7 10	0 0	0 14
1906	0 6	0 0	.. ..	0 10	1941	14 0	6 20	6 4	6 14
1907	0 12	12 10	.. ..	0 6	1942	3 7	13 6	19 14	0 14
1908	4 0	11 6	.. ..	6 4	1943	.. ..	27 6	.. ..	0 13
1909	0 8	17 0	.. ..	.. ..	1944	.. ..	.. ..	.. ..	23 7
1910	0 0	5 3	.. ..	0 3	1945	0 28	20 14	.. ..	32 13
1911	0 0	3 6	6 8	0 3	1946	14 27	30 2	13 12	21 18
1912	20 0	6 6	16 6	0 6	1947	21 31	0 17	7 33	21 0
1913	15 5	3 3	3 0	22 9	1948	20 7	14 20	7 47	21 21
1914	36 0	19 14	20 0	20 0	1949	6 29	13 21	13 33	38 0
1915	41 0	13 7	10 6	14 0	1950	6 14	12 47	26 63	.. ..

Intercollegiate Team Records, 1950

NOTE—This compilation includes games played through Nov. 25. Those desiring later results may obtain them by writing to the

Information Please Almanac, 444 Madison Ave., New York 22, N. Y., enclosing a stamped return envelope and stating scores wanted.

ALABAMA

27—Chattanooga.	0
26—Tulane.	14
22—Vanderbilt.	27
34—Furman.	6
9—Tennessee.	14
14—Miss. State.	7
14—Georgia.	7
63—Miss. Southern.	0
64—Georgia Tech.	19
41—Florida.	13

AMHERST

13—Colby.	0
14—Champlain.	0
32—Bowdoin.	20
27—Coast Guard Acad.	21
14—Wesleyan.	14
20—Tufts.	22
13—Trinity.	47
13—Williams.	27

ARIZONA

26—West Texas State.	34
14—Utah.	27
32—Hardin-Simmons.	28
13—Texas Western.	14
25—Colorado.	28
19—Denver.	14
38—New Mexico.	0
13—Tempe State.	47
7—Texas Tech.	39
27—Iowa State.	28

ARKANSAS

7—Okla. A. & M.	12
50—No. Texas State.	6
6—Texas Christian.	13
27—Baylor.	6
14—Texas.	19
13—Vanderbilt.	14
13—Texas A. & M.	42
6—Rice.	9
7—So. Methodist.	14
13—Tulsa.	28

ARMY

28—Colgate.	0
41—Penn State.	7
27—Michigan.	6
49—Harvard.	0
34—Columbia.	0
28—Penn.	13
61—New Mexico.	0
7—Stanford.	0

AUBURN

14—Wofford.	19
0—Vanderbilt.	41
0—S. E. Louisiana.	6
7—Florida.	27
0—Georgia Tech.	20
0—Tulane.	28
0—Miss. State.	27
10—Georgia.	12
0—Clemson.	41

BATES

7—Rhode Island St.	34
0—Massachusetts.	26
0—Springfield.	27
0—Tufts.	25
14—Northeastern.	13
6—Maine.	19
0—Bowdoin.	13
8—Colby.	20

BAYLOR

0—Wyoming.	7
34—Houston.	7
14—Miss. State.	7
6—Arkansas.	27
26—Texas Tech.	12
27—Texas A. & M.	20
20—Texas Christian.	14
20—So. Methodist.	27
3—So. Methodist.	0

BOSTON COLLEGE

7—Wake Forest.	7
0—Oklahoma.	28
0—Mississippi.	54
6—Fordham.	26
10—Georgetown.	20
7—Georgia.	19
13—Penn State.	20
14—Clemson.	35
7—Villanova.	29

BOSTON U.

21—Duquesne.	7
21—St. Bonaventure.	25
7—Miami (Fla.).	34
7—Syracuse.	13
16—Wm. & Mary.	14
41—N. Y. U.	13
19—Idaho.	26
7—Coll. of Pacific.	65

BOWDOIN

19—Tufts.	13
7—Wesleyan.	14
20—Amherst.	32
27—Williams.	21
26—Colby.	13
13—Bates.	0
6—Maine.	6

BRIGHAM YOUNG

14—Idaho State.	43
13—Tempe State.	41
28—Pepperdine.	27
28—Utah.	28
14—Colorado A. & M.	27
3—Denver.	42
27—Utah State.	13
0—Wyoming.	48
7—Hawaii.	39
28—Fort Hood (Tex.).	14

BROOKLYN COLL.

0—Niagara.	34
0—N. Y. U.	66
6—Buffalo.	52
13—Alfred.	28
12—C. C. N. Y.	0
13—Kings Point.	34

BROWN

12—Yale.	36
21—Holy Cross.	41
65—Rhode Island St.	13
0—Princeton.	34
34—Colgate.	35
0—Rutgers.	15
0—Pennsylvania.	50
13—Harvard.	14
0—Columbia.	33

BUCKNELL

20—Gettysburg.	16
13—Muhlenberg.	18
6—Lehigh.	27
34—Wash. & Jeff.	0
12—Colgate.	23
32—Lafayette.	0
41—N. Y. U.	0
3—Temple.	0
13—Delaware.	0

BUFFALO

13—Cortland.	0
19—Louisville.	48
23—Niagara.	27
13—Alfred.	0
52—Brooklyn College.	6
33—Rhode Island St.	12
14—Ohio U.	22
34—R. P. I.	14

CALIFORNIA

27—Santa Clara.	9
28—Oregon.	7
14—Pennsylvania.	7
7—So. California.	7
27—Oregon State.	0
40—St. Mary's (Calif.).	25
14—Washington.	7
35—U.C.L.A.	0
13—San Francisco.	7
7—Stanford.	7

CARNEGIE TECH

20—Davis & Elkins.	12
34—Bethany.	3
26—Akron.	13
14—Allegheny.	13
36—Case.	27
21—Wash. & Jeff.	14
0—Lehigh.	66
20—Westminster.	0

CATHOLIC U.

32—Bridgewater Coll.	0
21—Randolph-Macon.	26
13—Johns Hopkins.	13
7—Mt. St. Mary's.	40
33—Gallaudet.	0
7—Washington (Md.).	25

C. C. N. Y.

7—New Haven T.	34
6—Colby.	47
7—Hamilton.	12
0—Wagner.	14
6—Susquehanna.	7
0—Brooklyn College.	12
13—Upsala.	27
33—Lowell Textile.	6

CHATTANOOGA

0—Alabama.	27
0—Abilene.	13
8—Memphis State.	26
0—Tennessee.	19
14—No. Texas State.	41
13—Miss. Southern.	14
12—Vanderbilt.	34
0—Mississippi.	20
32—Duquesne.	20
4—Dayton.	7

CINCINNATI

32—Texas Western.	0
19—Hardin-Simmons.	7
14—Wm. & Mary.	20
28—Louisville.	20
7—Kentucky.	41
48—Western Reserve.	6
27—Western Michigan.	6
23—Ohio U.	0
14—Coll. of Pacific.	7
33—Xavier (Ohio).	20
0—Miami (Ohio).	28

THE CITADEL

56—Parris Is. Marines.	0
3—Florida.	7
0—Miami (Fla.).	21
0—Wash. & Lee.	20
19—Davidson.	12
7—Presbyterian.	0
14—Virginia.	34
7—So. Carolina.	7
7—V. M. I.	13

CLARKSON

7—Rochester.	7
27—Hofstra.	19
6—Alfred.	7
6—Cortland T.	14
6—St. Lawrence.	32
21—R. P. I.	0
0—Hartwick.	20

CLEMSON

55—Presbyterian.	0
34—Missouri.	0
27—N. C. State.	0
14—South Carolina.	14
13—Wake Forest.	12
53—Duquesne.	20
35—Boston Coll.	14
67—Furman.	2
41—Auburn.	0

COLBY

0—Amherst.	13
47—C. C. N. Y.	6
6—Northeastern.	0
6—Trinity.	0
13—Bowdoin.	26
7—Maine.	26
20—Bates.	8

COLGATE

0—Army.	28
47—Western Reserve.	6
35—Holy Cross.	28
23—Bucknell.	12
3—Brown.	34
7—Princeton.	46
18—Cornell.	28
19—Syracuse.	14

COLL. OF PACIFIC

40—St. Mary's (Calif.).	0
0—Louisiana State.	19
41—Denver.	7
43—Nevada.	7
33—Loyola (L. A.).	35
72—Fresno State.	7
33—Santa Clara.	14
7—Cincinnati.	14
56—Boston U.	7

COLORADO

7—Iowa State.	14
34—Kansas State.	6
21—Kansas.	27
28—Nebraska.	19
28—Arizona.	25
20—Utah.	20
18—Oklahoma.	27
19—Missouri.	21
21—Oregon.	7
31—Colorado A. & M.	6

COLORADO A. & M.

30—Denver.	14
48—Colorado College.	7
0—Wyoming.	34
27—Brigham Young.	14
6—Utah State.	13
0—Utah.	7
13—Tempe State.	21
6—Colorado.	31

COLUMBIA

42—Hobart.	12
28—Harvard.	7
14—Yale.	20
0—Pennsylvania.	34
0—Army.	34
20—Cornell.	19
7—Dartmouth.	14
7—Navy.	29
33—Brown.	0

CONNECTICUT

0—Yale.	25
14—American Int'l.	25
20—Ohio Wesleyan.	14
13—Springfield.	12
7—Maine.	18
14—N. Y. U.	7
7—New Hampshire.	21
7—R. I. State.	14

CORNELL

27—Lafayette.	0
26—Syracuse.	7
28—Harvard.	7
7—Yale.	0
0—Princeton.	27
19—Columbia.	20
26—Colgate.	18
24—Dartmouth.	0
13—Pennsylvania.	6

DARTMOUTH

21—Holy Cross.	21
7—Michigan.	27
25—Penn.	42
14—Lehigh.	16
27—Harvard.	7
7—Yale.	0
14—Columbia.	7
0—Cornell.	24
7—Princeton.	13

DAVIDSON

20—Furman.	32
24—Presbyterian.	0
12—The Citadel.	19
22—Wash. & Lee.	47
44—Erskine.	0
6—V. M. I.	46
19—N. C. State.	15
39—Richmond.	0
14—Georgia Tech.	46

DELAWARE

0—Lehigh.	21
13—West Chester T.	13
32—Penn M. C.	20
7—Lafayette.	9
0—Muhlenberg.	0
0—Temple.	39
0—W. and L.	32
0—Bucknell.	13

DENVER

0—Drake.	7
14—Colorado A. & M.	30
6—Kansas.	48
7—Coll. of Paeflo.	14
14—Utah.	14
42—Brigham Young.	3
14—Arizona.	19
6—San Francisco.	24
48—Utah State.	0
12—Wyoming.	42

DETROIT

40—Hillsdale.	0
34—Wayne.	0
13—Wichita.	21
14—Marquette.	27
13—Michigan.	13
14—Drake.	13
19—Villanova.	7
47—Duquesne.	14
20—Okla. A. & M.	13

DICKINSON

25—Grove City.	0
0—F. and M.	7
39—Ursinus.	6
13—West. Maryland.	29
28—Juniata.	0
6—Gettysburg.	7
19—Johns Hopkins.	33

DRAKE

7—Denver.	0
47—Kansas State T.	0
41—South Dakota.	13
14—Okla. A. & M.	14
34—Iowa State T.	18
14—Wichita.	17
13—Detroit.	14
42—Bradley.	14
35—Iowa State.	21

DREXEL

26—Ursinus.	0
13—Gettysburg.	7
19—Penn M. C.	7
21—Washington (Md.).	0
25—West. Maryland.	26
28—Swarthmore.	7
7—West Chester T.	6

DUKE

14—South Carolina.	0
29—Pittsburgh.	14
7—Tennessee.	28
7—N. C. State.	0
41—Richmond.	0
14—Maryland.	28
39—Georgia Tech.	21
7—Wake Forest.	13
47—Virginia Tech.	7
7—North Carolina.	0

DUQUESNE

14—St. Vincent.	14
28—Villanova.	39
14—Florida.	27
7—Boston U.	21
25—St. Bonaventure.	12
27—Louisville.	20
20—Clemson.	53
14—Detroit.	47
24—Chattanooga.	32

FLORIDA

7—The Citadel.	3
27—Duquesne.	16
13—Georgia Tech.	14
27—Auburn.	17
21—Vanderbilt.	27
19—Furman.	7
0—Kentucky.	40
0—Georgia.	6
13—Miami (Fla.).	20
14—Alabama.	41

FORDHAM

20—Lafayette.	19
0—Yale.	21
25—Boston College.	6
2—West Virginia.	23
21—San Francisco.	13
14—Georgetown.	14
26—Temple.	21
13—N. Y. U.	0

FRANK. & MARSH.

13—Lebanon Valley.	7
20—Johns Hopkins.	14
7—Dickinson.	0
25—W. Maryland.	0
14—Albright.	0
0—Swarthmore.	0
39—Ursinus.	0
34—W. and J.	0
59—Gettysburg.	20

FURMAN

12—Presbyterian.	13
6—Wash. & Lee.	27
32—Davidson.	20
6—South Carolina.	21
6—Alabama.	34
13—Florida.	19
13—Wofford.	13
7—Geo. Washington.	34
2—Clemson.	57
0—Georgia.	40

GEORGIA

27—Maryland.	7
7—St. Mary's (Calif.).	7
0—North Carolina.	0
27—Miss. State.	0
13—Louisiana State.	13
19—Boston College.	7
7—Alabama.	14
6—Florida.	0
12—Auburn.	10
40—Furman.	0

GEORGIA TECH

13—So. Methodist.	33
0—So. Carolina.	7
15—Florida.	13
3—Louisiana State.	0
20—Auburn.	0
14—Kentucky.	28
0—Duke.	30
13—V. M. I.	40
7—Alabama.	54
46—Dav dson.	14

GEORGETOWN

14—Penn State.	34
7—Tulsa.	21
0—Maryland.	25
0—Boston College.	10
14—Villanova.	20
7—Miami (Fla.).	42
19—Fordham.	14
21—Holy Cross.	14
6—Geo. Washington.	7

GEO. WASHINGTON

0—Virginia.	19
15—V. M. I.	12
21—West Virginia.	14
42—Virginia Tech.	7
0—Wake Forest.	13
20—South Carolina.	34
7—Maryland.	23
34—Furman.	7
7—Georgetown.	6

GETTYSBURG

15—Bucknell.	20
19—West. Maryland.	0
7—Drexel.	13
6—Lehigh.	49
7—Muhlenberg.	28
46—Hopkins.	14
7—Dickinson.	6
12—Albright.	14
20—F. and M.	59

HAMILTON

6—Middlebury.	21
12—C. C. N. Y.	7
0—Oberlin.	82
0—Haverford.	32
6—Kenyon.	7
7—Hobart.	21
19—Union.	26

HARVARD

7—Columbia.	28
7—Cornell.	28
0—Army.	48
7—Dartmouth.	27
7—Holy Cross.	26
0—Princeton.	63
14—Brown.	13
6—Yale.	14

HAVERFORD

20—Ursinus.	12
7—Rider.	28
13—Juniata.	7
32—Hamilton.	0
13—Hobart.	28
7—Susquehanna.	12
13—Swarthmore.	6

HOBART

12—Columbia.	42
13—St. Lawrence.	20
6—Trinity.	21
20—Kenyon.	34
33—Union.	0
28—Haverford.	13
21—Hamilton.	7

HOFSTRA

6—Upala.	20
19—Clarkson.	27
7—Wagner.	20
12—Moravian.	0
0—St. Lawrence.	39
6—Kings Point.	18
6—St. Michael's.	41
63—Loyola (Mont.).	6

HOLY CROSS

21—Dartmouth.	21
41—Brown.	21
0—Colgate.	35
0—Syracuse.	34
13—Yale.	14
26—Harvard.	7
19—Marquette.	21
14—Georgetown.	21
26—Temple.	21

IDAHO

26—Utah.	19
21—Montana State.	28
33—Texas Western.	43
0—Oregon.	10
7—Wash. State.	7
7—Wyoming.	14
19—Oregon State.	34
26—Gaston U.	19
21—Tempe State.	48

ILLINOIS

28—Ohio U.	2
6—Wisconsin.	7
14—U. of A.	0
20—Washington.	13
0—Indiana.	0
7—Michigan.	0
21—Iowa.	7
14—Ohio State.	7
7—Northwestern.	14

INDIANA

20—Nebraska.	20
20—Iowa.	7
14—Ohio State.	28
20—Notre Dame.	7
0—Illinois.	20
0—Michigan State.	35
7—Michigan.	20
18—Marquette.	7
0—Purdue.	13

IOWA

20—So. California.	14
7—Indiana.	20
0—Wisconsin.	14
33—Purdue.	21
21—Oh o State.	83
19—Minnesota.	21
7—Illinois.	21
14—Notre Dame.	14
6—Miami (Fla.).	14

IOWA STATE

14—Colorado.	7
13—Northwestern.	23
26—Iowa State T.	6
21—Kansas.	33
20—Missouri.	20
7—Oklahoma.	20
26—Kansas State.	7
21—Drake.	35
13—Nebraska.	20
26—Arizona.	27

JOHNS HOPKINS

14—F. and M.	20
34—Susquehanna.	0
14—Hamden-Sydney.	25
13—Catholic U.	13
0—Gettysburg.	48
21—Swarthmore.	7
33—Dickinson.	19
6—W. Maryland.	14

KANSAS

7—Texas Christian.	14
14—Denver.	6
27—Colorado.	21
20—Iowa State.	21
40—Okla. A. & M.	7
26—Nebraska.	33
0—Utah.	28
13—Oklahoma.	33
47—Kansas State.	7
6—Missouri.	20

KANSAS STATE

55—Baker U.	0
7—Washington.	33
6—Colorado.	24
0—Marquette.	46
7—Missouri.	28
0—Oklahoma.	58
7—Iowa State.	13
21—Nebraska.	49
7—Kansas.	47
0—Okla. A. & M.	41

KENTUCKY

25—No. Texas State.	0
0—Louisiana State.	0
27—Mississippi.	0
40—Dayton.	0
41—Cincinnati.	7
34—Villanova.	7
28—Georgia Tech.	14
40—Florida.	6
48—Miss. State.	21
83—North Dakota.	0
0—Tennessee.	7

LAFAYETTE

19—Fordham.	20
0—Cornell.	27
7—Scranton.	20
6—Muhlenberg.	21
9—Delaware.	7
0—Bucknell.	32
0—Syracuse.	34
7—Rutgers.	31
0—Lehigh.	26

LEBANON VALLEY

7—F. and M.	13
39—Mt. St. Mary's.	0
20—Muhlenberg.	13
14—Moravian.	27
13—Albright.	13
7—Penn M. C.	6
7—West. Maryland.	19
7—Scranton.	27

LEHIGH

21—Delaware.	0
21—Case.	20
21—Bucknell.	6
43—Gettysburg.	8
16—Dartmouth.	14
21—Rutgers.	18
42—Muhlenberg.	13
66—Carnegie Tech.	0
38—Lafayette.	0

LOUISIANA STATE

6—Kentucky.	14
19—Coll. of Pacifco.	0
20—Rice.	35
0—Ga. Tech.	13
13—Georgia.	13
40—Mississippi.	14
33—Vanderbilt.	7
7—Miss. State.	13
13—Villanova.	7

LOYOLA (CALIF.)

60—Pepperdine.	14
6—St. Mary's (Calif.).	0
14—San Jose State.	7
35—Coll. of Pacifco.	33
34—Nevada.	7
21—Hardin-Simmons.	20
26—Fresno State.	0

MAINE

13—Rhode Island St.	0
15—Vermont.	7
0—New Hampshire.	19
16—Connecticut.	7
19—Bates.	6
26—Colby.	7
6—Bowdoin.	6

MARQUETTE

67—No. Dakota State.	0
6—Wisconsin.	28
46—Kansas State.	6
27—Detroit.	14
6—Mich. State.	34
21—Santa Clara.	14
21—South Carolina.	13
21—Holy Cross.	19
7—Indiana.	18

MARYLAND

7—Georgia.	27
35—Navy.	21
34—Mich. St.	7
25—Georgetown.	14
13—N. C. State.	7
26—Duke.	14
23—Geo. Washington.	7
7—No. Carolina.	7
41—West Virginia.	0

MASSACHUSETTS

26—Bates.	0
20—Worcester Tech.	21
34—Williams.	42
27—Rhode Island St.	38
27—Northeastern.	6
27—Vermont.	13
0—Springfield.	26
6—Tufts.	7

MIAMI (FLA.)

21—The Citadel.	0
16—Villanova.	12
20—Purdue.	12
34—Boston U.	0
26—Pittsburgh.	0
42—Georgetown.	7
13—Louisville.	13
20—Florida.	14
14—Iowa.	6

MIAMI (OHIO)

54—Bowling Green.	6
0—Xavier (Ohio).	7
36—Western Mich.	0
28—Butler.	7
28—Ohio U.	13
39—Wichita.	20
27—Dayton.	13
69—Western Reserve.	14
28—Cincinnati.	0

MICHIGAN

7—Mich. State.	14
27—Dartmouth.	7
6—Army.	27
28—Wisconsin.	13
7—Winn.	7
0—Illinois.	7
20—Indiana.	7
34—Northwestern.	23
9—Ohio State.	3

MICHIGAN STATE

38—Oregon State.	13
14—Michigan.	7
7—Maryland.	34
33—Wm. & Mary.	14
34—Marquette.	6
36—Notre Dame.	33
35—Indiana.	0
27—Minnesota.	0
19—Pittsburgh.	0

MIDDLEBURY

13—Wesleyan.	13
0—Hamilton.	6
0—St. Lawrence.	39
0—Tufts.	19
19—Trinity.	35
32—New ch.	6
20—Union.	19
7—Vermont.	24

MINNESOTA

13—Washington.	28
26—Nebraska.	32
6—Northwestern.	13
0—Ohio State.	48
7—Michigan.	7
0—Iowa.	13
0—Mich. State.	27
27—Purdue.	14
0—Wisconsin.	14

MISSISSIPPI

39—Memphis State.	7
0—Kentucky.	7
54—Boston College.	0
14—Vanderbilt.	20
20—Tulane.	27
19—Texas Christian.	7
14—Louisiana State.	40
20—Chattanooga.	8
0—Tennessee.	35

MISS. STATE

67—Arkansas State.	0
7—Tennessee.	0
7—Baylor.	14
7—Alabama.	27
7—Georgia.	14
27—Auburn.	0
21—Kentucky.	48
13—Louisiana State.	7

MISSOURI

0—Clemson.	34
0—So. Methodist.	21
28—Kansas State.	7
20—Iowa State.	20
27—Okla. A. & M.	0
34—Nebraska.	40
21—Colorado.	19
7—Oklahoma.	41
20—Kansas.	6

MONTANA STATE U.

53—East. Washington.	0
28—Idaho.	27
13—Oregon.	21
7—Wash. State.	14
0—Montana Coll.	0
0—Oregon State.	20
35—Puget Sound.	7
14—Nevada.	19
38—Utah State.	7

MUHLENBERG

18—Bucknell.	13
13—Lebanon Valley.	20
21—Lafayette.	6
28—Gettysburg.	7
0—Delaware.	0
13—Lehigh.	42
13—Scranton.	20
6—Albright.	33

NAVY

21—Maryland.	35
0—Northwestern.	22
14—Princeton.	20
27—So. California.	14
7—Pennsylvania.	30
10—Notre Dame.	19
0—Tulane.	27
29—Columbia.	7

NEBRASKA

20—Indiana.	20
32—Minnesota.	28
19—Colorado.	28
19—Penn State.	0
33—Kansas.	26
40—Missouri.	34
49—Kansas State.	21
20—Iowa State.	13
35—Oklahoma.	49

NEVADA

6—Utah State.	7
18—Texas A. & M.	48
6—San Francisco.	66
7—Coll. of Pacifco.	43
0—Santa Clara.	55
7—Loyola (L. A.).	25
14—St. Mary's (Calif.).	34
19—Montana St. U.	14
0—N. Texas State.	34
19—Wichita.	37

NEW HAMPSHIRE

62—Champlain.	6
27—Rhode Island St.	14
19—Maine.	0
14—Springfield.	0
47—Vermont.	0
21—Connecticut.	7
33—Tufts.	19
13—Kent State.	7

N. Y. U.

6—Kings Point.	6
55—Brooklyn College.	0
0—Rutgers.	42
7—Connecticut.	14
7—Bucknell.	41
13—Boston U.	41
0—Fordham.	13

NORTH CAROLINA

13—N. C. State.	7
7—Notre Dame.	14
0—Georgia.	0
7—Wake Forest.	13
40—Wm. & Mary.	7
0—Tennessee.	16
7—Marshall.	7
14—So. Carolina.	7
0—Duke.	7

N. C. STATE

7—North Carolina.	13
7—Catawba.	6
0—Clemson.	27
0—Duke.	7
16—Maryland.	13
34—Virginia Tech.	6
7—Richmond.	0
15—Davidson.	7
6—Wake Forest.	8
0—Wm. & Mary.	34

NORTHWESTERN

23—Iowa State.	13
22—Navy.	0
13—Minnesota.	6
26—Pittsburgh.	23
13—Wisconsin.	14
0—Ohio State.	32
19—Purdue.	14
23—Michigan.	34
14—Illinois.	7

NOTRE DAME

14—North Carolina.	2
14—Purdue.	28
13—Tulane.	10
7—Indiana.	20
0—Michigan State.	36
19—Navy.	10
18—Pittsburgh.	7
14—Iowa.	14

OHIO STATE

27—So. Methodist.	32
41—Pittsburgh.	7
26—Indiana.	14
43—Minnesota.	0
83—Iowa.	21
32—Northwestern.	0
19—Wisconsin.	14
7—Illinois.	14
3—Michigan.	9

OKLAHOMA

28—Boston Coll.	0
34—Texas A. & M.	28
14—Texas.	13
0—Kansas State.	0
27—Colorado.	7
33—Kansas.	18
41—Missouri.	13
49—Nebraska.	35

OKLA. A. & M.

12—Arkansas.	7
13—Texas Christian.	7
14—Drake.	14
0—So. Methodist.	58
7—Kansas.	40
0—Missouri.	27
13—Iowa.	27
32—Wisconsin.	20
13—Detroit.	20
41—Kansas State.	0

OREGON

0—U. C. L. A.	28
7—California.	28
0—Montana.	13
0—Idaho.	0
13—St. Mary's (Calif.).	18
21—So. California.	30
13—Wash. State.	21
12—Washington.	27
7—Colorado.	21
2—Oregon State.	14

OREGON STATE

13—Mich. State.	36
0—Stanford.	21
6—Washington.	35
0—California.	27
2—Montana.	0
13—U. C. L. A.	19
34—Idaho.	19
7—Wash. State.	21
14—Oregon.	2

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34—Georgetown.	14
7—Army.	41
7—Syracuse.	27
0—Nebraska.	19
7—Temple.	7
20—Boston College.	13
27—West Virginia.	0
18—Rutgers.	14

PENNSYLVANIA

21—Virginia.	7
7—California.	14
42—Dartmouth.	26
34—Columbia.	0
30—Navy.	7
13—Army.	28
60—Brown.	0
26—Wisconsin.	0
6—Cornell.	13

PITTSBURGH

14—Duke.	28
7—Ohio State.	41
7—Rice.	14
23—Northwestern.	28
0—Michigan (Fla.).	28
21—West Virginia.	18
7—Notre Dame.	18
0—Mich. State.	19

PRINCETON

68—Williams.....	0
34—Rutgers.....	28
28—Navy.....	14
34—Brown.....	0
27—Cornell.....	0
45—Colgate.....	7
63—Harvard.....	26
47—Yale.....	12
13—Dartmouth.....	7

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26—Texas.....	34
26—Notre Dame.....	14
14—Miami (Fla.).....	20
21—Iowa.....	33
6—U. C. L. A.....	20
7—Wisconsin.....	13
14—Northwestern.....	19
14—Minnesota.....	27
13—Indiana.....	0

R. P. I.

0—Alfred.....	14
0—Union.....	28
14—Kings Point.....	15
13—Worcester Tech.....	0
7—Rochester.....	0
0—Clarkson.....	21
0—Coast Guard Acad.....	27
14—Buffalo.....	34

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12—Buffalo.....	32
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14—Connecticut.....	7

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35—Louisiana State.....	20
14—Pittsburgh.....	14
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13—Texas Tech.....	7
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0—Denver.....	6
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7—California.....	19

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9—California.....	27
7—Rice.....	27
27—St. Jose State.....	14
10—Stanford.....	23
56—Nevada.....	0
13—Marquette.....	21
14—Coll. of Pacific.....	33
6—San Francisco.....	27
9—St. Mary's (Calif.).....	0

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20—Lafayette.....	7
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26—Penn M. C.....	0
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23—Santa Clara.....	13
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7—So. California.....	7
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6—Temple.....	7
7—Cornell.....	26
27—Penn State.....	7
34—Columbia.....	0
6—Boston U.....	0
34—Lafayette.....	21
0—John Carroll.....	0
14—Colgate.....	19

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41—Brigham Young.....	13
41—New Mexico.....	6
63—Flagstaff.....	0
14—Hardin-Simmons.....	41
28—Utah State.....	0
49—New Mex. A. & M.....	0
31—San Diego State.....	13
47—Arizona.....	0
21—Colorado A. & M.....	13
48—Idaho.....	21

TEMPLE

32—Albright.....	6
7—Syracuse.....	6
20—Rutgers.....	26
26—Wayne.....	0
7—Penn State.....	7
39—Delaware.....	0
0—Bucknell.....	35
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56—Miss. Southern.....	0
0—Miss. State.....	0
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20—Alabama.....	7
27—Wash. & Lee.....	20
16—North Carolina.....	0
48—Tenn. Tech.....	14
35—Mississippi.....	0
7—Kentucky.....	0

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28—Texas Tech.....	14
34—Purdue.....	26
23—Oklahoma.....	14
19—Arkansas.....	14
35—Rice.....	7
27—So. Methodist.....	20
21—Tex.-s Christian.....	7

TEXAS A. & M.

48—Nevada.....	18
32—Texas Tech.....	13
0—Oklahoma.....	0
52—V. M. I.....	34
42—Texas Christian.....	23
20—Baylor.....	27
42—Arkansas.....	13
25—So. Methodist.....	20
13—Rice.....	21

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14—Kansas.....	7
0—Okla. A. & M.....	13
13—Arkansas.....	6
19—Texas Tech.....	6
23—Texas A. & M.....	42
7—Mississippi.....	19
14—Baylor.....	20
7—Texas.....	21
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14—Texas.....	28
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37—New Mexico.....	11

TRINITY (CONN.)

40—Sewanee.....	11
41—Coast Guard Acad.....	0
21—Hobart.....	6
0—Colby.....	0
35—Middlebury.....	19
47—Amherst.....	13
24—Wesleyan.....	7
48—Tufts.....	6

TUFTS

13—Bowdoin.....	19
0—Northwestern.....	0
26—Bates.....	0
17—Middlebury.....	27
0—Williams.....	20
22—Amherst.....	20
19—New Hampshire.....	33
7—Massachusetts.....	6
6—Trinity.....	48

TULANE

14—Alabama.....	28
64—Louisiana Coll.....	0
9—Notre Dame.....	13
27—Mississippi.....	20
28—Auburn.....	0
27—Navy.....	0
28—Virginia.....	18
35—Vanderbilt.....	6

TULSA

20—McMurry.....	13
14—San Francisco.....	23
21—Georgetown.....	7
27—Villanova.....	7
13—Detroit.....	13
0—Bradley.....	7
27—Okla. A. & M.....	13
3—Texas Tech.....	7
28—Arkansas.....	13

U. C. L. A.

28—Oregon.....	0
72—Wash. State.....	0
20—Washington.....	21
6—Illinois.....	14
21—Stanford.....	7
20—Purdue.....	6
20—Oregon State.....	13
0—California.....	36
39—So. California.....	0

UNION

7—St. Lawrence.....	14
20—R. P. I.....	0
7—Rochester.....	7
40—Champlain.....	20
0—Hobart.....	33
7—Williams.....	14
6—Middlebury.....	20
26—Hamilton.....	19

UTAH

19—Idaho.....	26
27—Arizona.....	14
28—Brigham Young.....	28
14—Denver.....	14
13—Wyoming.....	53
20—Colorado.....	20
26—Kansas.....	39
7—Colo. A. & M.....	32
46—Utah State.....	0

UTAH STATE

7—Nevada.....	6
6—Wash. State.....	46
20—Wichita.....	49
34—Montana State.....	6
7—Wyoming.....	40
0—Tempe State.....	26
13—Colorado A. & M.....	33
13—Brigham Young.....	72
0—Denver.....	48
7—Montana.....	38
0—Utah.....	48

Professional Football

NATIONAL LEAGUE CHAMPIONS

Source: National Football League.

Year	Team	Won	Lost	Tied	Pct.	Year	Team	Won	Lost	Tied	Pct.
1921	Bears (Staley's).....	10	1	1	.909	1938	Green Bay Packers (W).....	8	3	0	.727
1922	Canton Bulldogs.....	10	0	2	1.000	1939	*Green Bay Packers (W).....	9	2	0	.818
1923	Canton Bulldogs.....	11	0	1	1.000	1939	New York Giants (E).....	9	1	1	.900
1924	Cleveland Bulldogs.....	7	1	1	.875	1940	*Chicago Bears (W).....	8	3	0	.727
1925	Chicago Cardinals.....	11	2	1	.846	1940	Washington Redskins (E).....	9	2	0	.818
1926	Frankford Yellow Jackets.....	14	1	1	.933	1941	*Chicago Bears (W).....	10	1	0	.909
1927	New York Giants.....	11	1	1	.917	1941	New York Giants (E).....	8	3	0	.727
1928	Providence Steamrollers.....	8	1	2	.888	1942	*Washington Redskins (E).....	10	1	0	.909
1929	Green Bay Packers.....	12	0	1	1.000	1942	Chicago Bears (W).....	11	0	0	1.000
1930	Green Bay Packers.....	11	3	1	.786	1943	*Chicago Bears (W).....	8	1	1	.889
1931	Green Bay Packers.....	12	2	0	.857	1943	Washington Redskins (E).....	6	3	1	.667
1932	Chicago Bears.....	7	1	6	.875	1944	*Green Bay Packers (W).....	8	2	0	.800
1933	*Chicago Bears (W).....	10	2	1	.833	1944	New York Giants (E).....	8	1	1	.889
1933	New York Giants (E).....	11	3	0	.786	1945	*Cleveland Rams (W).....	9	1	0	.900
1934	*New York Giants (E).....	8	5	0	.615	1945	Washington Redskins (E).....	8	2	0	.800
1934	Chicago Bears (W).....	13	0	0	1.000	1946	*Chicago Bears (W).....	8	2	1	.800
1935	*Detroit Lions (W).....	7	3	2	.700	1946	New York Giants (E).....	7	3	1	.700
1935	New York Giants (E).....	9	3	0	.750	1947	*Chicago Cardinals (W).....	9	3	0	.750
1936	*Green Bay Packers (W).....	10	1	1	.909	1947	Philadelphia Eagles (E).....	9	4	0	.692
1936	Boston Redskins (E).....	7	5	0	.587	1948	*Philadelphia Eagles (E).....	9	2	1	.818
1937	*Washington Redskins (E).....	8	3	0	.727	1948	Chicago Cardinals (W).....	11	1	0	.917
1937	Chicago Bears (W).....	9	1	1	.900	1949	*Philadelphia Eagles (E).....	11	1	0	.917
1938	*New York Giants (E).....	8	2	1	.800	1949	Los Angeles Rams (W).....	8	2	2	.800

* Won title play-off. (W) Western Division champion. (E) Eastern Division champion.

CHAMPIONSHIP PLAY-OFF RESULTS

1933 Chicago Bears 23, New York 21.
 1934 New York 30, Chicago Bears 13.
 1935 Detroit 26, New York 7.
 1936 Green Bay 21, Boston 6.
 1937 Washington 28, Chicago Bears 21.
 1938 New York 23, Green Bay Packers 17.
 1939 Green Bay 27, New York 0.
 1940 Chicago Bears 73, Washington 0.
 1941 Chicago Bears 37, New York 9.

1942 Washington 14, Chicago Bears 6.
 1943 Chicago Bears 41, Washington 21.
 1944 Green Bay 14, New York 7.
 1945 Cleveland 15, Washington 14.
 1946 Chicago Bears 24, New York 14.
 1947 Chicago Cardinals 28, Philadelphia 21.
 1948 Philadelphia 7, Chicago Cardinals 0.
 1949 Philadelphia 14, Los Angeles 0.

ALL-AMERICA CONFERENCE

Champions

Year	Team	Won	Lost	Tied	Pct.
1946	*Cleveland Browns (W)....	12	2	0	.857
1946	New York Yankees (E)....	10	3	1	.769
1947	*Cleveland Browns (W)....	12	1	1	.923
1947	New York Yankees (E)....	11	2	1	.846
1948	*Cleveland Browns (W)....	14	0	0	1.000
1948	Buffalo Bills (E).....	8	7	0	.533
1949	Cleveland Browns.....	9	1	2	.900

* Won title play-off.

TITLE PLAY-OFF RESULTS

1946 Cleveland Browns 14, New York Yankees 9.
 1947 Cleveland Browns 14, New York Yankees 3.
 1948 Cleveland Browns 49, Buffalo Bills 7.
 1949 Cleveland Browns 21, San Francisco 49ers 7.

Ski Jumpers Timed at 50.4 m.p.h.

Ski jumpers were timed in full flight for the first time during the F. I. S. world championships at Lake Placid, N. Y., last February. A time-interval meter was installed at the take-off at the lip of the Intervalles Olympic jump and as each skier passed his body intercepted two parallel beams of light eight feet apart across the track. The highest speeds recorded were 50.4 miles per hour.

1950 THOROUGHbred CHAMPIONS

Horse of the Year—C. T. Chenery's Hill Prince
 Handicap Horse—Mrs. C. S. Howard's Noor
 Handicap Filly or Mare—Calumet Farm's Two Lea
 3-Year-Old—Hill Prince
 3-Year-Old Filly—Alfred G. Vanderbilt's Next Move
 2-Year-Old—George D. Widener's Battleground
 2-Year-Old Filly—Duval A. Headley's Aunt Jinny
 Sprinter—Mrs. Louis Lazare's Shellas Reward
 Steeplechaser—Mrs. Ogden Phipps' Oedipus

Evans Takes Snowshoe Marathon

Lloyd Evans of Montreal finished first the 10-mile marathon, highlight of the silver jubilee meet of the International Snowshoe Union at Lewiston, Maine, last February. Evans was clocked in 1 hour 12 minutes 22 seconds, 8 minutes slower than the record, for the distance. Evans also won the other long race, a 3-mile test.

Ben Hogan won the Greenbrier Open golf tournament at White Sulphur Springs, W. Va., May 4-7, 1950, and tied the world record for 72 holes on a par 70 course with a 21-under-par 259. Hogan put together successive rounds of 64, 64, 65, 66, over the Old White course to equal the mark set by Byron Nelson in the 1945 Seattle Open at that city's Broadmoor course.

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Compiled by

ROBERT E. GRAYSON

Director, Special Libraries Association



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